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IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF OKLAHOMA

UNITHERM FOOD SYSTEMS, INC.,

a Illinois corporation; and

JENNIE-O FOODS, INC., a

Minnesota corporation,

Plaintiffs,

-vs
SWIFT-ECKRICH, INC., d/b/a,

CONAGRA REFRIGERATED FOODS, a

Delaware corporation,

)

VIDEO DEPOSITION OF ARNOLD S. MIKELBERG

Defendant.

TAKEN ON BEHALF OF THE PLAINTIFFS

IN OKLAHOMA CITY, OKLAHOMA

ON SEPTEMBER 7, 2001

REPORTED BY: JENNI L. GUNTER, CSR
DODSON COURT REPORTING, INC.
POST OFFICE BOX 892560
OKLAHOMA CITY, OKLAHOMA 73189
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APPEARANCES

For th Plaintiffs:

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For the Defendant:

Robert A. Schroeder Attorney at Law 350 West Colorado Boulevard Suite 500 Post Office Box 7068

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Also Present: Cheryl Coy - Videographer David Howard

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1	STIPULATIONS
2	It is hereby stipulated and agreed
3	by and between the parties hereto, through their
4	respective attorneys, that the deposition of
5	ARNOLD S. MIKELBERG may be taken on behalf of the
6	Plaintiffs on September 7, 2001, in Oklahoma City,
7	Oklahoma, by Jenni L. Gunter, Certified Shorthand
8	Reporter for the State of Oklahoma, pursuant to
9	agreement and the Federal Rules of Civil
10	Procedure.
11	It is further stipulated and agreed by
12	and between the parties hereto, through their
13	respective attorneys, that all objections, except
14	as to the form of the question, are reserved until
15	the time of trial, at which time they may be made
16	with the same force and effect as if made at the
17	time of the taking of this deposition.
18	It is further stipulated and agreed by
19	and between the parties hereto, through their
20	respective attorneys, that the time of filing of
21	this deposition is expressly waived.
22	
23	* * * * *
24	
2 =	

```
1
                       ARNOLD S. MIKELBERG,
       of lawful age, being first duly sworn, deposes and
 2
       says in reply to the questions propounded as
       follows:
                           EXAMINATION
       BY MR. BAILEY:
                Would you state your name, please?
 9
                Arnold Steven Mikelberg.
                It might be helpful if you would spell
10
       your last name for us.
11
12
                M-i-k-e-l-b-e-r-q.
13
                And what's your residence address, Mr.
       Mikelberg?
14
                1471 Wedgewood Drive, Lake Forest,
15
       Illinois.
16
                What's your educational background?
17
                Bachelor of Science, Michigan State
18
19
       University.
20
                When did you receive that degree?
21
           Α
                1958.
22
                And would you briefly describe your work
23
       history since you graduated from college?
24
           Α
                When I graduated from Michigan State I
       went to work for Highgrade Food Products
25
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1 Corporation in Indianapolis, Indiana, and I went
```

- from a trainee to a general manager of one of
- 3 their factories. And I left them in 1970, became
- 4 vice president of South Chicago Packing Company
- 5 where I was till 1971. I became a vice president
- of a company called Package Provision Company,
- 7 which was a company that mainly dealt with beef
- 8 products. I worked with them in the Republic of
- 9 Haiti for one year.
- I went to work as a vice president of
- 11 Thorn Apple Valley Incorporated in Grand Rapids,
- 12 Michigan. I was there until 1977 when I went to
- work for John Morrell & Company as senior vice
- 14 president of processed meat operations. I was
- there for 11 years.
- I went back to work for Thorn Apple
- 17 Valley as executive vice president for -- and a
- director until 19 -- from '88 to '94 when I became
- 19 president of Armour Swift-Eckrich, a division of
- 20 ConAgra. I retired from there in 1995, I think --
- no, 1997 or somewhere in that area. I can't
- 22 remember exactly.
- 23 Q Is it -- is it fair and accurate to say
- that you've spent your entire adult life in the
- 25 meat industry?

- 1 A Yes, it's very accurate.
- 2 Q And what do you do currently?
- 3 A I'm a consultant to the industry. I work
- 4 as a consultant for Smithfield Foods; I work for a
- 5 consultant for SMG, Incorporated; I work as a
- 6 consultant for Fresh Mark. Also I represent the
- 7 bondholders and creditors for a company called
- 8 Custom Food Products Corporation, and I also do
- 9 consulting for Farmland.
- 10 Q Well, being an old guy, the names Armour
- 11 Swift-Eckrich to me sound pretty formidable in the
- meat industry. How did that come to be affiliated
- 13 with ConAgra?
- 14 A ConAgra, I believe -- and I'm not sure of
- the exactness of this -- at one time bought SIPCO
- 16 from -- and then bought -- and then had -- ConAgra
- 17 already had Armour, and then they bought
- 18 Swift-Eckrich later on.
- 19 Q But that was all part of ConAgra when you
- went to work, as president?
- 21 A That is correct.
- 22 Q Now, when you say president of Armour
- 23 Swift-Eckrich, what was your principal
- 24 responsibility?
- 25 A My responsibility, for profitability with

- 1 Armour Swift-Eckrich company and for Decker and
- for Hebrew National, which was two other
- 3 companies.
- 4 Q And what was the relationship with
- 5 ConAgra when you became president of Armour
- 6 Swift-Eckrich?
- 7 A Armour Swift-Eckrich was a division of
- 8 ConAgra Refrigerated, which was a division of
- 9 ConAgra.
- 10 Q What -- give us some sense of the total
- 11 size of ConAgra.
- 12 A Of the volume?
- 13 Q Yes.
- 14 A I heard it was 21 billion, but I'm not
- 15 sure of that number.
- 16 Q And what -- give me some approximation of
- 17 the percentage of the totality of ConAgra that was
- 18 represented by Armour Swift-Eckrich.
- 19 A Probably, oh, it must have been -- Armour
- 20 Swift-Eckrich as compared to ConAgra?
- Q Yes.
- A Oh, about 6 percent.
- Q Okay. And what was it that Armour
- 24 Swift-Eckrich did?
- 25 A Armour Swift-Eckrich was strictly a

```
processor -- a manufacturer of processed
```

- 2 refrigerated meat products, sausages, ham, canned
- 3 meats, et cetera.
- 4 Q Okay.
- 5 A Canned hams, et cetera.
- 6 Q What I have seen is the word
- 7 Swift-Eckrich. There's no Armour on it anymore.
- 8 What do you know about that?
- 9 A I don't know whether it's Armour
- 10 Swift-Eckrich or Swift-Eckrich today.
- 11 Q Okay. How long were you president?
- 12 A Of that particular division?
- 13 Q Yes, uh-huh.
- 14 A Oh, a little under two years.
- 15 Q Who was your second in command?
- 16 A My second in command was a fellow by the
- 17 name of Ted Berry.
- 18 Q What was his responsibility?
- 19 A He was responsible for the operations.
- 20 Q There's a name that I've seen,
- 21 Weatherspoon.
- 22 A He was in charge of research and
- 23 development and quality control.
- Q When you went to work as president of
- 25 Armour Swift-Eckrich, what did you do to

```
1 familiarize yourself with what was under
```

- 2 development there?
- A I met with J. B. Weatherspoon several
- 4 times, including a daily meeting that we had every
- 5 day. He pretty well kept me up to date with what
- 6 was going on in the research and development
- 7 field.
- 8 Q When did you first meet David Howard?
- 9 A I met David Howard at an IFFA convention
- in Germany, and that had to be in 19 -- oh, '91 or
- 11 '92, somewhere in there.
- 12 O And what was IFFA?
- 13 A No, it wasn't 1991 -- yeah, 1991 or '92,
- 14 somewhere in there.
- 15 IFFA is International Federation of --
- 16 it's a meat processing and equipment show that's
- every three years in Frankfurt, Germany.
- 18 Q And what was the basis for your meeting
- 19 Mr. Howard at that time?
- A He had a booth there, and we saw some of
- 21 his products and got his business card, and he got
- 22 ours.
- Q When did you next meet Mr. Howard?
- 24 A Oh, about a year later he paid a visit to
- our corporate headquarters in Detroit, and he told

```
1 us about what his plans were for working in the
```

- 2 United States.
- 3 Q Now, you said he met -- you met him about
- a year later at your corporate headquarters?
- 5 A Right.
- 6 Q Corporate headquarters of what company?
- 7 A Thorn Apple Valley, Incorporated.
- 8 Q At that time you were at Thorn Apple
- 9 Valley?
- 10 A Right.
- 11 Q What did they do?
- 12 A We were pro -- we were slaughterers of
- pigs, and we were manufacturers of processed meat
- 14 products, sellers, marketers.
- 15 Q And what interest did Thorn Apple Valley
- 16 have, if any, in David Howard's concepts and
- 17 ideas?
- 18 A Well, David was a manufacturer of
- 19 stainless steel cooking and items, and he made
- different proposals to us of things to process
- 21 meats with.
- 22 Q Did you arrange -- did you arrive at any
- business relationship with Howard at that time?
- 24 A Probably a little later we commissioned
- 25 him to do some work for us in our Grand Rapids

- 1 facility.
- 2 Q What work was that?
- A He built some blenders; he build some --
- 4 he gave -- sold us stainless steel tanks; he built
- 5 conveyers for us during this period of time.
- 6 Q At issue in this litigation is a process
- 7 for browning precooked whole muscle meat products
- 8 and applying a liquid pyrolysis to the surface of
- 9 the meat and subjecting it to high temperature
- 10 without significant shrinkage. Are you familiar
- 11 with that process?
- 12 A Yes.
- 13 Q Where did you first see that process?
- 14 A I heard of the process -- David made a
- visit to us in Detroit when I was at Thorn Apple
- Valley and described the process to me that could
- 17 more quickly brown or coat bake-on coating on a
- product than the way we were doing it at the time,
- 19 which was going right back into batch smokehouses
- 20 with it and resmoking it or redrying it or doing
- 21 what had to be necessary.
- 22 Q The way that you were doing it at the
- time, was it something that took longer?
- 24 A It took much longer.
- 25 Q And was more costly?

```
1 A It was much more costly because you had
```

- 2 to have people putting it in, taking it out,
- 3 taking it off the racks, putting it on the racks.
- 4 The timing in the cookhouse was greater. And most
- 5 important of all, the yields were considerably
- 6 lower.
- 7 Q When you say the yields were lower, what
- 8 do you mean?
- 9 A If you put a hundred pounds in, you were
- lucky to get 88 pounds out; but on this process
- 11 when you put a hundred pounds in, he explained to
- us at this time, you could get 97 percent out,
- which was a considerable improvement.
- Q What is the year that you have reference
- 15 to?
- 16 A It has to be around '94. It was before I
- 17 left Thorn Apple Valley. It was while I was still
- 18 there.
- 19 Q Did you yourself ever observe the process
- 20 being demonstrated?
- 21 A Right before I left Thorn Apple Valley I
- had made a visit to Manchester, and David showed
- 23 me the oven and how it was working.
- Q Manchester?
- 25 A England. He had a fabricating operation

```
in Manchester, England.
```

- Q What was the reason for you to be in
- 3 Manchester, England?
- 4 A I -- he was building some equipment for
- 5 us, and before shipment we wanted to observe how
- 6 it worked.
- 7 Q And was anyone with you at that time?
- 8 A Yes.
- 9 Q Who was that?
- 10 A There were two people with me, my son and
- a man by the name of George Weiss, I believe, but
- 12 I'm not positive on that. Because I'm not sure
- whether he left to go back before I reached there
- or not. I just don't remember whether he was
- 15 there or not.
- 16 Q Well, was he a Thorn Apple Valley
- 17 employee?
- 18 A Yeah. He was a purchasing -- responsible
- 19 for -- vice president of purchasing for Thorn
- 20 Apple Valley.
- 21 Q Did there come a time when Thorn Apple
- Valley entered into a business relationship with
- David Howard or his company, Unitherm, to prepare
- 24 any meat products in that fashion?
- 25 A I can only go from belief. I believe so.

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I was not there at the time.
```

- Q Because it was after that that you then
- 3 became president of --
- 4 A Of Armour Swift-Eckrich.
- 5 Q Okay. When you became president of
- 6 Armour Swift-Eckrich, and I believe you said that
- 7 was 1995?
- A Yes, yes.
- 9 Q Okay. What relationship did you have
- with David Howard professionally at that point?
- 11 A He was just a potential supplier.
- 12 Q Now, did you enter into any
- communications with him about this process?
- 14 A Yeah. I had one of my people, Ted Berry,
- get in touch with David because we were having --
- 16 we were at a point of capacity problems in
- Jonesboro, Arkansas where we were putting the
- 18 product back into cookhouses as similar I did at
- 19 TAV, and I was looking -- I knew that David had a
- 20 process that would speed this up and save us
- 21 considerable money and less expensive than buying
- 22 more cookhouses.
- Q And what did you do to initiate the
- 24 contact with Howard?
- 25 A We had David Howard come in and make a

```
1 presentation to our company on this process.
```

- Q And was that -- would that be in 1995, to
- 3 your best recollection?
- 4 A Yes, somewhere in later 19 -- mid-1995.
- When you say that you had David Howard
- 6 come in and make a demonstration, what -- what
- 7 transpired?
- 8 A We brought David in. He talked to our
- 9 people about the process and how -- and what he
- 10 could do, and we made an arrangement at the time
- 11 to have a piece of equipment sent in to be tested.
- 12 Q Arrangements with Mr. Howard?
- 13 A With Mr. Howard.
- 14 Q And was it his equipment?
- 15 A It was his equipment. He brought it into
- the product development area of our company, and
- we started testing with it.
- 18 Q Who were the Armour Swift-Eckrich people
- 19 that were present when David Howard came to talk
- 20 to you about it?
- 21 A I believe it was myself, David Howard,
- 22 Ted Berry, J. B. Weatherspoon, I believe Frank
- 23 Carroll (phonetic), who was an operations man who
- 24 worked for them, but I can't remember anybody else
- 25 that was out there.

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1 Q Where did the meeting take place?
```

- 2 A It took place in my office and later in
- 3 the day down in the product development area, that
- 4 I can remember.
- 5 Q Do I have it straight, that your
- 6 testimony is that you asked him to put equipment
- 7 in the custody of Armour Swift-Eckrich to test the
- 8 process?
- 9 A That is correct. He offered; we
- 10 accepted.
- 11 Q And what transpired after that?
- 12 A We tested the product. And when the
- first presentation of the product that had been
- 14 manufactured to that was made I believe I was not
- present, and it was not as successful as we wanted
- it to be. And I don't -- I can't remember what
- was not acceptable about the product. I was --
- they kept testing, and things just never
- progressed. One day I said "What's going on with
- this process, " and J. B. Weatherspoon said "Well,
- we're..." "Well, I want to see product that's
- 22 made properly and the way it should be done
- 23 through this equipment." And within a week or so
- 24 we had another showing of product that was very --
- 25 that was -- it was excellent product that came out

```
1 of the equipment.
```

- Q When Mr. Howard transported the equipment
- 3 to Armour Swift-Eckrich for this testing of this
- 4 process, did he put a time limit on the length of
- 5 time you could keep the equipment?
- A I can't remember.
- 7 Q Okay. How long did Armour Swift-Eckrich
- 8 keep the equipment?
- 9 A I couldn't tell you, but it was several
- 10 months.
- 11 Q In that period of time what
- 12 communications, if any, did you have with Mr.
- 13 Howard about the testing?
- 14 A Not a lot. It was -- the communications
- 15 was not -- shouldn't have been from the president
- of the company; it should have been from the
- people that were testing the equipment and Ted
- 18 Berry.
- 19 Q Did anyone tell you at Armour
- Swift-Eckrich when you became president that this
- 21 process that you've described that David Howard
- demonstrated for you had already been demonstrated
- 23 to them previously?
- A No, they did not.
- Q Did they tell you that they themselves

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were in the process of developing this -- if
```

- you'll forgive me -- process?
- 3 A They did not.
- 4 Q When research is being done at Armour
- 5 Swift-Eckrich while you were there, what was --
- 6 what was the budgeting process for that?
- 7 A We didn't have a budgeting process for it
- 8 per se, we just had to -- if there was money in
- 9 the budget we applied for that monies to do that.
- Q Was there any time when you saw any money
- 11 budgeted for the testing of this process before
- 12 David Howard came on the scene?
- A No, I'd never -- I've never seen any.
- 14 Q The name, and I may not say it right, but
- it appears to me to be pronounced Prem Singh?
- 16 A That's correct.
- 17 Q Is that a correct pronunciation?
- 18 A Prem Singh, yes.
- 19 Q And who is Prem Singh?
- 20 A Prem Singh was a product development
- personnel that worked for J. B. Weatherspoon on
- 22 specific projects.
- Q For Armour Swift-Eckrich?
- 24 A For Armour Swift-Eckrich. But he
- 25 reported to J. B. Weatherspoon.

```
1 Q What was your communication with Prem
```

- 2 Singh, if any?
- A Not a lot. "Hello, good-bye."
- 4 Q Uh-huh. I take it, based upon your
- testimony just given, that you didn't have any
- discussions with Prem Singh where he said "I'm
- 7 working on this process independently of David
- 8 Howard?"
- 9 A No, I had no discussions of that kind.
- 10 Q There's another name, and I may have this
- one wrong too, but I believe the last name is
- Hussein (phonetic). Does that ring a bell?
- 13 A Not at all.
- Q Okay. I probably have that one messed
- 15 up.
- 16 A I just don't -- you couldn't mess it up
- enough that I wouldn't know. I don't know anybody
- 18 by that name.
- 19 Q Okay. I believe you testified that after
- you talked to Mr. Weatherspoon the process was
- 21 developed to your satisfaction?
- 22 A To my satisfaction it was.
- 23 Q And what did you do to satisfy yourself?
- 24 A I tasted that as compared to the product
- 25 that we were making today and looked at it, and in

- 1 my view it was as good or better.
- 2 O Now, how was it being done separate and
- 3 apart from David Howard's process? You said
- 4 you --
- 5 A Well, it was either -- and I cannot
- 6 remember -- but it was either from our own lab
- 7 making it in batch ovens there, or it was shipped
- 8 up as product from Jonesboro, but I don't
- 9 remember.
- 11 mean?
- A Well, that's an oven that you can put
- racks in of product to be smoked or resmoked,
- 14 whatever.
- 15 Q Is this comparable to the process you
- described a while ago that takes a long time --
- 17 A That is correct.
- 18 Q -- and is costly?
- 19 A That is correct.
- 20 Q Now, Jonesboro, where is that?
- 21 A In Arkansas.
- Q And what's that got to do with it?
- 23 A That's a plant that produced turkey
- 24 breast product, and this was the product that we
- were working with to reduce the cost of.

```
1 Q Is that where you received your turkey
```

- products?
- 3 A Most of our turkey products came out of
- 4 Jonesboro.
- 5 Q Now, was Jonesboro an Armour
- 6 Swift-Eckrich operation?
- 7 A Yes, it was.
- Q Okay. I think I see what you're saying.
- 9 So that's where you got the product as it
- 10 were to test?
- 11 A That is correct.
- 12 Q When you did the taste testing, did you
- 13 actually participate in that?
- 14 A In the final one, yes.
- 15 Q And your -- as I understand it, your
- 16 conclusion was it was --
- 17 A Satisfactory.
- 18 Q Yes. And what written documents, if any,
- were generated through that process?
- 20 A I'm sure there was a report written.
- There was always -- whenever I attended there was
- some sort of report written which I got at a later
- 23 time.
- Q Did you keep any contemporaneous record
- while you were actually engaged in the tasting of

```
the meat?
```

- 2 A I believe we each had a form to fill out,
- 3 but it's several years ago, and I don't remember
- 4 whether I filled one out or I didn't fill one out.
- 5 Q After you concluded that the process
- 6 produced a product that you deemed to be
- 7 satisfactory, what did you do, if anything, to act
- 8 on that?
- 9 A Well, there was a group of people in
- which included marketing, sales, product
- development, operations, myself, product
- 12 development people, and we -- we decided at that
- meeting while the product a lot of people thought
- was better than the product we made, it wasn't
- exactly the same, and the marketing people felt
- that the risk was too great to go on this tangent,
- that the consumer was satisfied with our product
- at that time, and we didn't want to change it.
- 19 O And what -- what developed thereafter, if
- anything, with reference to the process?
- 21 A We sent the machine back to David Howard.
- 22 Q Now, when did you next have any
- involvement with the process, if you did?
- 24 A I never had anything after that.
- 25 O How long after you sent the equipment

```
back to David Howard was it before you left the
```

- 2 presidency of Armour Swift-Eckrich?
- A Oh, I think several months after that.
- 4 Q What were considered to be the marketing
- 5 issues that would discourage your marketing people
- 6 from bringing it to market?
- 7 A Well, the product was a little more
- 8 moist, and the texture was slightly different than
- 9 the product that was on the market, and the color
- 10 was brighter. It was a better -- to my -- I
- 11 thought it was a better color, but it looked
- 12 different than the color that was -- was made.
- 13 Q Do you know, based upon your current
- involvement in the meat industry, whether this
- 15 process is in current use?
- 16 A At Armour Swift-Eckrich?
- 17 Q Well --
- 18 A Yeah, there are people that are using
- 19 this process.
- 20 Q And how about generally in the meat
- 21 industry?
- 22 A I think it's an accepted process in the
- 23 meat industry.
- Q Is it widely used?
- 25 A I couldn't tell you how widely it is

```
1 used, but I know that it's used.
```

- Q What is --
- A And I know that other people have gone
- 4 into possibly manufacturing equipment similar to
- 5 this.
- 6 O What --
- 7 A Marketing equipment similar to this.
- 8 Q Excuse me. What is the principal meat
- 9 product that is produced pursuant to this process?
- 10 A Well, I think turkey breast and ham,
- 11 cooked ham.
- 12 Q Precooked turkey breast and precooked
- 13 ham?
- 14 A Ham, right.
- Q And what is the principal end use of it?
- 16 A For the deli market. For deli, for
- 17 slicing at a deli level.
- 18 Q What about cafeterias, restaurants, that
- 19 sort of thing?
- A Food service also, can be used in food
- 21 service.
- 22 Q Is it a product that is available to the
- consumer who walks down the aisle at the
- 24 supermarket?
- 25 A At the supermarket -- at the deli counter

- in the supermarket, yes.
- 2 Q Is it -- describe the geographic market
- 3 for me. How expansive is that?
- 4 A It's across the entire United States from
- 5 coast to coast. Turk -- turkey breast items is
- one of the largest selling deli items in the
- 7 United States.
- 8 Q Is that a meat product that during your
- 9 tenure in the -- in the operational end of the
- 10 meat industry experienced a significant growth?
- 11 A Oh, absolutely. Tremendous growth.
- 12 Q And when did that growth occur or start
- 13 occur -- to occur?
- 14 A The growth really started in the '80s.
- 15 '80s, and in the '90s it's been exceptional,
- especially when health issues became prevalent.
- 17 It's a low-fat, high-protein item, and marketing
- is such.
- 19 Q I have some documents here that I'd like
- to visit with you about, Mr. Mikelberg. I'm going
- 21 to mark this first one as Plaintiffs' Deposition
- 22 Exhibit 1 and let counsel for defendant look at
- 23 it.
- 24 (Plaintiffs' Exhibit No. 1 was
- 25 marked for identification purposes

```
and made a part of the record.)
```

- MR. BAILEY: I don't have an extra copy.
- 3 The only one I have is mine.
- 4 Q (By Mr. Bailey) Mr. Mikelberg, I'm going
- 5 to hand you what's marked Plaintiffs' Deposition
- 6 Exhibit 1. It has a Bates stamp number in the
- 7 lower right-hand corner of U-03293. What is this
- 8 Exhibit 1?
- 9 A This was a letter sent to Eli Dorfman who
- worked for me. He was the general manager of the
- 11 deli and smoked meats plant that we -- that Thorn
- 12 Apple Valley had in Detroit.
- 13 Q I notice it's dated 15 April, 1993.
- 14 A Yes.
- 15 Q And you're copied on it?
- 16 A Right.
- 17 Q Do you recall seeing this document?
- 18 A I don't recall seeing the exact document,
- but I'm sure that if it came to me I saw it.
- 20 Q What is the -- what is the letter
- 21 discussing?
- 22 A The letter is discussing the process that
- 23 David talked to me about, about browning the
- turkey breasts and the advantages for doing it.
- 25 O Was this before you saw the process

```
demonstrated in Manchester, England?
```

- 2 A Yes.
- 3 Q What -- what did you do in response to
- 4 this correspondence from David Howard?
- 5 A I did nothing.
- 6 Q What did Mr. Dorfman do, if anything?
- 7 A I'm sure he talked to David about it, but
- 8 I wasn't in the meeting at that -- at that
- 9 particular stage, that I remember.
- 10 Q When you saw the process demonstrated in
- 11 Manchester what was the pyrolysis agent that was
- 12 used?
- 13 A I couldn't tell you.
- 14 Q Okay. But some was, some liquid
- 15 pyrolysis?
- 16 A I'm -- I'm -- I'm not sure.
- 17 Q Okay. What is the -- the word pyrolysis,
- I looked it up because I didn't know what it
- 19 meant. What does that mean?
- 20 A It doesn't mean you being paralyzed.
- 21 It's an agent that will cling to the product and
- help in the coloration of it.
- Q Maillose, what does that mean to you?
- 24 A It's a sugar. Maillose is a -- I think a
- 25 sugar derivative.

```
1 Q And is that used in this possess, to your
```

- 2 knowledge?
- 3 A I couldn't tell you for sure.
- 4 Q Did the brown -- the issue of trials on
- 5 browning turkey breasts here, and it speaks to the
- 6 results were highly successful. 98 percent yield
- 7 in 14 minutes. 94 percent. I misspoke.
- 8 A Yeah.
- 9 Q 94 percent yield in 14 minutes.
- 10 Is that, the use of the word yield, that
- 11 you had talked about earlier?
- 12 A Yes.
- 13 Q That is you get less shrinkage?
- 14 A Yield is the difference between what you
- 15 put in and what you got out.
- 16 Q So if the process is one where you are
- able to brown these turkey breasts with less
- 18 shrinkage, that's what we're talking about here?
- 19 A That is correct.
- 20 Q Did Thorn Apple Valley ever receive any
- 21 product that had been done by this process from
- 22 Unitherm?
- 23 A I believe so.
- Q What is Boston Markets?
- 25 A Boston Markets is -- it's a franchise

```
that sells chicken, and Thorn Apple Valley was
```

- 2 making a ham product, a double smoked ham product
- 3 for them. Double smoked meant that it was cooked
- 4 and smoked and then resmoked again.
- 5 Q Now, does the -- does Boston Market mean
- 6 something about the city of Boston, or is it --
- 7 A No. It's just a name that was given.
- 8 Boston Chicken originally, then it was Boston
- 9 Markets, and it's been sold. I guess McDonald's
- 10 owns it now.
- 11 Q What recollection, if any, do you have of
- 12 Unitherm providing Thorn Apple Valley with hams
- 13 for sale and distribution to Boston Markets?
- 14 A None. I was not present, but I knew that
- they were because I'd opened the account.
- 16 Q I've got another document that I'm going
- to mark Plaintiffs' Deposition Exhibit 2.
- 18 (Plaintiffs' Exhibit No. 2 was
- marked for identification purposes
- and made a part of the record.)
- MR. BAILEY: Let counsel review that. It
- has two pages.
- Q (By Mr. Bailey) I hand you Defendant's
- 24 Exhibit -- excuse me, Plaintiffs' Exhibit 2 and
- ask you what that is, please?

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1 A This was a note I sent to David Howard.
```

- 2 And he asked me if I would tell him what my
- 3 connection with this machine and everything was,
- 4 and I tried to explain what it was.
- 5 Q Is this in your handwriting?
- 6 A This is my handwriting.
- 7 Q Would you look at the second page of this
- 8 Exhibit 2 --
- 9 A Right.
- 10 Q -- and confirm that that is a typewritten
- 11 version of your handwritten --
- 12 A Yes, it is.
- 13 Q -- note?
- Okay. There's a -- what apparently was a
- stick on, and on this particular copy at least it
- says to Ella, Unitherm, and there's a phone
- number, a fax number, dated August 18, 2000, from
- 18 Arnie Mikelberg. Is that your handwriting?
- 19 A I don't -- this?
- 20 Q Yes.
- 21 A No.
- Q Okay.
- 23 A It could have been one of the secretaries
- in my office.
- 25 Q Yeah. And then on the next page you'll

```
see at the bottom there's another Post-it note.
```

- That, I take it, is not in your handwriting
- 3 either?
- 4 A No, that is not.
- 5 Q Okay.
- 6 A That's from Ella.
- 7 Q Well, it's easier for me to read the
- 8 typewritten version than it is your handwriting.
- 9 A I think I sent Ella this copy and had her
- 10 type it out, and she sent it. That's why this
- 11 copy was sent.
- 12 Q Okay.
- A I didn't -- I didn't have anybody to do
- 14 my typing at that time.
- 15 Q So she typed it or had it typed and sent
- 16 it back to you?
- 17 A Right.
- 18 Q Okay. Looking at the typed version, you
- say "I have been doing business with Unitherm for
- 20 eight years, since 1992, while holding the
- 21 positions of Executive Vice President of Thorn
- 22 Apple Valley Inc., as President of Armour
- 23 Swift-Eckrich, and as President of Arnold S.
- 24 Mikelberg Associates, a consulting company." And
- I think we've already covered that part of your

- background.
- 2 A (Nodding head.)
- 3 Q And it goes on to say "In 1994 David
- 4 Howard, President of Unitherm, presented to myself
- as Executive Vice President of Thorn Apple Valley
- a method he had developed to quickly smoke ham or
- 7 turkey on a continuous in-line operation."
- 8 Let me stop right there for a moment.
- 9 When you speak of a continuous in-line operation,
- 10 what do you have reference to?
- A Well, you make the product that goes on a
- conveyer, and it's in line through the process
- until it's a finished item.
- 14 Q Now, is that --
- 15 A Rather than batch one truck at a time.
- Q So is the in-line operation, therefore,
- am I correct in assuming that's a more efficient
- 18 operation?
- 19 A Yes.
- 20 O Less cost intensive?
- 21 A Yes.
- 22 Q And you go on to say, and I'm quoting
- again, "Thorn Apple Valley at a later date
- 24 purchased this equipment from Unitherm to smoke
- 25 ham product for Boston Markets." And that --

```
1 A I had heard about it --
```

- Q Okay.
- 3 A -- through my relationships.
- 4 Q The next -- the third paragraph says
- 5 "Some time in 1995, at my request, David presented
- 6 this method for smoking to Armour Swift-Eckrich.
- We requested that he send the equipment to our
- 8 product development lab in Downers Grove,
- 9 Illinois, which was managed by Dr. J. B.
- 10 Weatherspoon." That's the gentleman that we've
- talked about earlier, isn't it?
- 12 A (Nodding head.)
- 13 Q "The equipment was sent to the lab, where
- 14 it remained for several months to run tests on
- 15 turkey breast."
- This, I take it, is a written record of
- the testimony you gave that you asked David to
- 18 come to give you this demonstration of this
- 19 process?
- 20 A Right.
- 21 Q Why -- you might have already spoken --
- addressed this, Mr. Mikelberg, but I don't pull it
- 23 up immediately. Why was it that you contacted
- 24 David Howard to come and demonstrate this?
- 25 A We had a need for this type of in-line as

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1 we were approaching our capacity at Jonesboro, and
```

- I wanted to reduce the cost of the product because
- 3 we were paying an exceptionally high price for
- 4 turkey breast at that time. So it had a two --
- 5 two-phase need.
- 6 Q Yes. You say "After this -- " in the
- final paragraph, this fourth paragraph, and I
- 8 quote, "After this period of time, samples of
- 9 product were presented to sales, marketing, and
- 10 operations management of Armour Swift-Eckrich for
- 11 approval. It was decided at this time not to
- 12 proceed with the project. The product was
- 13 excellent, but it did not have the exact
- 14 consistency of current production and the
- equipment was sent back to Unitherm."
- 16 And that was -- is that the aspect of
- marketing that you spoke of earlier?
- 18 A Right.
- 19 Q Now, you left Armour Swift-Eckrich in
- 20 1996, I believe you've said?
- 21 A Right.
- Q About what time in that year?
- 23 A I would -- I still worked for ConAgra,
- but I left that position. I was doing some work
- 25 for ConAgra in Europe at that time, and eventually

- 1 I retired from there.
- 2 Q I think I might have missed that part of
- 3 your resume when we spoke earlier. Is -- do I
- 4 have it right that after you left the presidency
- of Armour Swift-Eckrich you continued to work for
- 6 ConAgra?
- 7 A Yeah. I was executive vice president of
- 8 refrigerated meats group, and I was responsible
- 9 for their operations in Europe.
- 10 Q And how long did you hold that job?
- 11 A Oh, about a year and-a-half.
- 12 Q So when was it that you retired from
- 13 ConAgra?
- 14 A I'm trying to think of the -- probably
- 15 three years ago.
- 17 A Right.
- 18 Q Did you -- in the period of time you were
- 19 president of Armour Swift-Eckrich and thereafter
- 20 while you were executive vice president of
- 21 ConAgra, did you ever receive any information that
- 22 Prem Singh was claiming to be the inventor of this
- 23 process?
- 24 A No, sir.
- Q When did you first learn that he had made

```
that claim?
```

- A About the time David Howard asked me if I
- 3 would do this, write this statement here.
- 4 Q Okay. How did you learn that?
- 5 A From David Howard.
- 6 Q That was -- that was news to you?
- 7 A Yes. I knew nothing about it.
- 8 Q And the whole time you were there, nobody
- 9 had ever mentioned to you, if I understand
- 10 correctly, with Armour Swift-Eckrich that they
- were purporting to work on this pro -- to develop
- this process?
- A Further, no.
- 14 Q Okay.
- MR. BAILEY: Mr. Schroeder, here's the...
- 16 (Plaintiffs' Exhibit No. 3 was
- 17 marked for identification purposes
- and made a part of the record.)
- 19 Q (By Mr. Bailey) Mr. Mikelberg, I hand you
- what I've marked Plaintiffs' Deposition Exhibit 3
- 21 and ask you what that is?
- 22 A It's a letter sent to me by -- I don't
- 23 know who -- David Howard prior to him coming into
- visit with us on the in-line smoking.
- Q What is the date of this letter?

```
1 A October 9th, 1995.
```

- 2 Q And you were president of Armour
- 3 Swift-Eckrich at that time?
- 4 A Right.
- 5 Q Do you recall receiving this letter?
- A I don't recall exactly receiving the
- 7 letter, but I'm sure that I did.
- 8 Q It's addressed to you and Ted Berry,
- 9 isn't it?
- 10 A Right.
- 11 Q He says "There are three areas I believe
- we can impact the profitability of your company."
- Number 1 is bacon cooking and handling; number 2,
- ham cooking using radio frequency; and 3, in-line
- smoking. And that, as I understand, is what we're
- 16 talking about here?
- 17 A That is correct.
- 18 Q And in the third paragraph it says "The
- smoke process, (3) we have already developed. We
- 20 have a question mark on the marketability of it
- 21 and value your input. The objectives of the trial
- are as follows," and he goes on to describe what
- that trial will be, correct?
- 24 A Right.
- 25 Q Is this what you were speaking of earlier

```
as the period of time when you had his equipment?
```

- 2 A That is correct. This is not -- this is
- 3 before the period of time that we had his
- 4 equipment.
- 5 Q Yes. This is setting it up --
- 6 A Yes.
- 7 Q -- as I read it?
- 8 A Right.
- 9 Q When it speaks of the smoke process, what
- 10 is your understanding of the smoke process?
- 11 A It's the process of heating the product
- and applying smoke so that the product is -- has
- the smoked appearance and flavor and smell when it
- 14 comes out of the process.
- 15 Q "Applying smoke," being the liquid
- 16 pyrolysis product?
- 17 A Right.
- 18 Q It says the objective trial -- or "The
- objectives of the trial are as follows: 1)
- 20 Unitherm will supply a 2 zone Rapidflow for a
- two-week period." Well, there we see what at
- least his thought was about how long you'd keep
- 23 the trial?
- 24 A Yes.
- 25 Q I guess the word Rapidflow applies to

```
certain parts of equipment, doesn't it?
```

- 2 A Rapidflow was the name of the equipment,
- 3 I believe, that it was.
- 4 Q Number 2, "Unitherm seek to prove uniform
- 5 smoking in less than ten minutes." And again,
- that's the issue of being it much more quickly
- 7 done --
- 8 A Right.
- 9 Q -- isn't it?
- Than the current process that was being
- 11 employed?
- 12 A That is correct.
- 13 Q "3) The shrink would be 1-3%" Again,
- 14 that's improving the yield?
- 15 A That is correct.
- 16 Q "4) The color should match or better your
- existing product." And that's just a -- I guess
- 18 an aesthetic quality?
- 19 A That is correct.
- 20 O "5) On success of the above, Armour
- 21 Swift-Eckrich will purchase the line."
- 22 A We did not make that agreement.
- Q Okay. That's David negotiating here?
- 24 A I would -- I would -- I would look at it
- 25 as a negotiating --

```
1 O Yes.
```

- 2 A But I made no other -- I made no
- 3 agreements with him at the time.
- 4 Q "6) Armour Swift Eckrich will share all
- 5 test data with Unitherm." Well, did you --
- 6 A As far as I know they did.
- 7 Q Or agreed to do that --
- 8 A Right.
- 9 O -- I assume?
- 10 "7) Unitherm will license Armour Swift
- 11 Eckrich with the process for a 50% percent of the
- 12 return on investment, exclusively." That was a
- proposal too, was it not?
- 14 A Yeah. I did not particularly care for
- 15 that proposal.
- 16 Q Sirs, I look forward to concluding the
- above in the next few weeks. I believe that the
- above current -- correctly reflects our agreement.
- 19 Yours sincerely, David Howard, President.
- Well, part of that you -- as I understand
- it, you said "Yes, let's get on with it, and we'll
- 22 make the other -- we'll determine the rest of it
- 23 later?"
- 24 A That's --

```
You're putting words in my mouth, but
 1
           Α
       that's correct.
 2
 3
           Q
                 Yeah.
           Α
                 And --
                 And if I say anything that is not
       correct --
                 Yeah. I will --
           Α
                 -- I want you to stop me.
 8
                 Yeah, I will tell you.
 9
           Α
10
           Q
                 I'm won't -- I invite you to do so.
                 I will tell you.
11
           A
12
                 I'm trying to move it along here a little
           0
       bit.
13
                 Okay.
14
           Α
15
                 (Plaintiffs' Exhibit No. 4 was
16
                 marked for identification purposes
                 and made a part of the record.)
17
18
                 MR. BAILEY: I have marked as Plaintiffs'
19
       Deposition Exhibit 4 another piece of
20
       correspondence.
21
           Q
                 (By Mr. Bailey) I hand you Exhibit 4, Mr.
       Mikelberg, which is a letter dated October 16,
22
```

addressed to Prem Singh at Armour Swift-Eckrich.

1995, which is seven days after Exhibit 3,

Have you ever seen this document?

23

24

```
1 A I don't know. I don't -- I really don't
```

- 2 know whether I've ever seen it. I don't think so.
- 3 It was sent to Prem Singh; I'm not copied. So I
- 4 know that I wouldn't have seen it.
- 5 Q Why would it -- if you know, why would
- 6 Mr. Howard have sent it to Prem Singh?
- 7 MR. SCHROEDER: Objection; calls for
- 8 speculation.
- 9 Q (By Mr. Bailey) If you know?
- 10 A I have no idea.
- 11 Q What was Prem Singh's job at Armour
- 12 Swift-Eckrich?
- 13 A He was responsible for certain phases of
- 14 research and development.
- 15 Q Well, was -- was he the person that was
- 16 to take custody of this equipment and do the
- 17 testing?
- 18 A I do not know.
- 19 Q Okay.
- 20 A I would assume so by the correspondence.
- 21 O Mr. Howard writes to Mr. Singh in part as
- follows after the first full paragraph, The
- 23 specific criteria for the trial was: 1) Liquid
- smoke application for turkey breasts, dwell time
- 7.5 minutes at 300 (sic) degrees centigrade is the

```
way I read it. Is that the way you read it?
```

- 2 A Yes. 330 degrees centigrade.
- 3 Q Yes. The internal temperature will rise
- 4 by 1 degree centigrade, 1 percent shrinkage.
- What's the significance, if any, to the
- 6 internal temperature?
- 7 A We don't want the internal temperature to
- 8 increase. We want to keep that as low as
- 9 possible --
- 10 Q Okay. And why is that?
- 11 A -- in this type of process.
- 12 Because we'd had to chill it down again.
- 13 I'm not interested in cooking it; I'm only
- interested in developing color on the outside of
- 15 the product. The faster we can develop the color
- 16 and the appearance, the better it is for the
- 17 process, the less shrink you're going to take.
- 18 You cook the inside, it's going to shrink a lot
- 19 more.
- 20 Q And the more cost effective the process?
- 21 A That is correct.
- Q Now, you say you have to chill it down
- again. When it comes out the other end of the
- 24 Rapidflow there has to be, I suppose, a packaging
- 25 done, and that --

- 1 A Yeah.
- 2 Q -- sort of thing?
- A It's normally chilled. Goes through some
- 4 sort of a chill process, a quick chill process --
- 5 O Uh-huh.
- 6 A -- and then vacuum packaging afterward.
- 7 Q And goes -- then is put out in the
- 8 market?
- 9 A That is correct.
- 10 Q Does it -- does this product have a --
- 11 how long a shelf life does it have?
- 12 A Oh, I would say 60 to 90 days.
- 13 Q Is there any distinction between the
- shelf life of this product -- of this process and
- the former way it was being done through the batch
- 16 ovens?
- 17 A I think this is -- enhances the shelf
- 18 life because there's less handling, and there's
- 19 less time between the time the product is cooked
- 20 and packaged.
- 21 O Uh-huh.
- 22 A Continuous in line rather than one piece
- 23 and one batch at a time.
- Q Number 2 he says browning turkey breasts
- 25 with skin on, dwell time 15 minutes at 330 degrees

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centigrade, 5 percent shrinkage, no glaze.
```

- What does that have reference to, if you
- 3 know?
- 4 A It just has reference to the criteria of
- 5 when you use a skin-on breast rather than on a
- 6 skinless breast.
- 7 Q So does the -- does the first, number 1,
- 8 relate to skinless?
- 9 A Well, I would -- in looking at it that's
- 10 what I would have assumed, but I just have assumed
- 11 that.
- 12 Q Okay.
- 13 A Because in the second he says the "skin
- 14 on."
- 15 Q Uh-huh.
- 16 A He doesn't say that in...
- 17 Q With longer dwell time, which --
- 18 A Right.
- 19 Q -- you would assume would be logical,
- 20 wouldn't you?
- 21 And then number 3 it says glazing both
- hams and turkeys, dwell time 3 minutes at 330
- 23 degrees centigrade?
- 24 A Yeah.
- 25 Q And 4, cooking of full turkeys i.e.

```
nominal 12 to 14 pounds, cook time 1 hour 50
```

- 2 minutes at 250 degrees centigrade.
- 3 That doesn't have anything to do with it,
- 4 does it?
- 5 A That's some criteria that was put in
- 6 there. I didn't read this letter --
- 7 Q Yeah. Okay.
- 8 A -- beforehand, so -- when I say
- 9 "beforehand," I mean before Prem Singh got it or
- 10 after Prem Singh got it. So this was between Prem
- 11 Singh and David, and I'm sure Prem Singh discussed
- 12 items with him on that.
- 13 Q But if -- again, if I -- if I have your
- 14 testimony straight in my head, you didn't have any
- 15 discussions with Prem Singh after this October 16,
- 16 '95 date about --
- 17 A These criteria?
- 18 Q Yeah.
- 19 A No, not that I can -- not that I can
- 20 remember.
- 21 Q Well, did he ever -- and maybe we've
- 22 covered this already. Did you ever inquire of him
- 23 how this testing was --
- 24 A I could have --
- 25 Q -- going?

```
-- but I don't -- I can't tell you
1
           Α
       specific times or when I did.
                MR. BAILEY: Mr. Schroeder, you've seen
       the patent, I take it?
                MR. SCHROEDER:
                MR. BAILEY: Okay.
                (Plaintiffs' Exhibit No. 5 was
                marked for identification purposes
9
                and made a part of the record.)
                (By Mr. Bailey) I hand you what I've
10
       marked as Plaintiffs' Deposition Exhibit 5, which
11
       is United States Patent, number 5,952,027.
12
       of patent it says September 14, 1999.
13
                Have you seen this patent?
14
                Yes, I have.
15
                Is this the process that David Howard
16
       demonstrated to you?
17
                From me reading the patent it's very,
18
           Α
       very similar to the process that David Howard
19
       presented to us. Technically, as far as reading a
20
       patent, I feel that I'm not adjudged to say if
21
       it's exactly the same or it isn't. But the
22
       principle of this is very, very similar to what
23
       was presented by David to me.
24
                For example, the abstract there on the
25
```

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front page of this document speaks as follows, "A
```

- 2 method of producing a crisp surface and imparting
- a uniform golden-brown color to a precooked whole
- 4 muscle meat product by coating at least a portion
- of the surface of a precooked whole muscle meat
- 6 product with a browning liquid pyrolysis product.
- 7 The coated surface is then exposed to an energy
- 8 source that selectively heats the coated surface
- 9 of the whole muscle meat product at a temperature
- 10 and for a time sufficient to develop a
- golden-brown color on the exposed surface, without
- substantially shrinking the precooked whole muscle
- 13 meat product."
- Now, that's --
- 15 A That's exactly what David presented to us
- of what he could -- he could do with his process,
- 17 exactly, this portion of it. But when I get into
- 18 the technical aspect of it, you know, I can't
- 19 compare because I don't have David -- what -- I
- 20 don't have David's exact terminologies either.
- Q Okay.
- 22 A The only word I don't know is pyrolysis.
- 23 Pyrolysis, I've never seen that word. Which means
- 24 heat transfer of some kind.
- 25 Q Yeah. On page 8, if you would turn to

```
that, please, sir. At the top of page -- well, at
```

- 2 least at number 8. It's not -- it's not -- in
- 3 this document it's -- just to be as accurate as we
- 4 can be, it's one, two -- the fifth page, but
- 5 there's an 8 at the top right-hand column --
- 6 A Yes. I got --
- 7 Q -- where it says "I claim."
- 8 A Right.
- 9 Q Number 1, A process for browning
- 10 precooked whole muscle meat products comprising:
- 11 coating a browning liquid -- coating a browning
- 12 liquid pyrolysis product onto at least a portion
- of the surface of a precooked whole muscle meat
- 14 product; and then exposing the coated surface to
- an energy source and selectively heating the
- 16 coated surface of the whole muscle meat product at
- 17 a temperature and for a time sufficient to develop
- a golden-brown color on the exposed surface,
- 19 without substantially shrinking the precooked
- whole muscle meat product.
- Now, is that the process that was done?
- 22 A That's the way I understand it.
- Q Okay.
- 24 A Or I understood it.
- 25 MR. BAILEY: Mr. Mikelberg, let's --

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let's take a short break here.
```

- THE WITNESS: Okay.
- 3 MR. BAILEY: Go off the record.
- 4 (A short recess.)
- 5 Q (By Mr. Bailey) Mr. Mikelberg, at that
- 6 meeting that you had while you were president of
- 7 Armour Swift-Eckrich when you had asked David
- 8 Howard to come to you and show you this process,
- 9 was P. S. Sampson present?
- 10 A It seems -- that's one -- that's the one
- 11 name I couldn't remember. It seems like he was
- 12 present, but I'm not -- I'm not positive. I only
- gave you the names of the people that I knew were
- 14 present at the meeting.
- 15 O Who was he?
- 16 A He was director of engineering, vice
- president of engineering for Armour Swift-Eckrich.
- 18 Q Now, while you were president of Armour
- Swift-Eckrich, what -- what were the total sales
- 20 of Armour Swift-Eckrich?
- 21 A 3.2 billion. That's a number that sticks
- in my head. I don't remember exact facts about it
- 23 because it's just -- it's not necessary.
- 24 Q There was a letter identified as
- 25 Plaintiffs' Deposition Exhibit 4 which was Mr.

```
1 Howard's letter to Prem Singh dated October 16,
```

- 2 1995, about the criteria for the trial that we
- 3 talked about. Were there -- were there
- 4 opportunities for Prem Singh to tell you if he was
- 5 working on this process prior to Unitherm?
- 6 A Yeah, I would think so.
- 7 Q And he never did?
- 8 A He never did. I think he even went to
- 9 Europe to look at some -- to David's factory in
- 10 Europe at one time in Manchester to look at
- 11 equipment there. He never said that he was
- working on this and he just wanted to check up on
- 13 it. And he never told me at any time that he was
- working on this project before or after David's
- 15 equipment.
- Q With reference to the product that came
- out of this process, were there sensory tests
- 18 performed on it external to Armour Swift-Eckrich?
- 19 A I do not remember.
- 20 MR. BAILEY: Thank you, Mr. Mikelberg. I
- 21 pass the witness.
- 22 EXAMINATION
- BY MR. SCHROEDER:
- Q Mr. Mikelberg, my name is Bob Schroeder,
- 25 and I represent Swift-Eckrich. I would like to

- 1 ask you a few questions.
- 2 A Sure.
- 3 Q Just to review for a moment. The period
- 4 of time during which you were employed as
- 5 president of Swift-Eckrich was approximately what?
- 6 A It seems -- as I mentioned before, it
- 7 seems like it was '94 or -- actually '95 through
- 8 some part of '96.
- 9 Q So for approximately how many months were
- you the president of Armour Swift-Eckrich?
- 11 A It seems like it was about 13 months, 14
- 12 months. But I -- there was an interim situation
- where I was president of another small division of
- them. But it was somewhere around that time.
- 15 Q So about 13 months starting sometime in
- 16 1995?
- 17 A Right.
- 18 Q And prior to the time that you became the
- 19 president of Armour Swift-Eckrich you had no
- 20 knowledge of what was going on within the company,
- 21 correct?
- 22 A That is correct.
- Q Now, we've spoken of a man named Prem
- 24 Singh. How much time total have you spent with
- 25 Mr. Singh?

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1 A Total?
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- 2 O Total.
- A If you totaled it all up, maybe an hour,
- 4 hour and-a-half.
- 5 Q And Mr. Singh during that hour and-a-half
- 6 didn't tell you of everything he'd ever did, did
- 7 he?
- 8 A No. But he never said that -- told me at
- 9 any time what he did on -- previous to this.
- 10 Q All right.
- 11 A Stated that.
- 12 Q Now, were you familiar with all the
- 13 people -- let me back up for a second.
- 14 At the time that you were the president
- 15 of Swift-Eckrich there was a research and
- development department, correct?
- 17 A Yes.
- 18 Q And there were people in that
- 19 department --
- 20 A Yes.
- 21 O -- on a full-time basis?
- 22 A Yes.
- Q Do you have any idea how many?
- 24 A I thought a hundred.
- Q Did you know all those people?

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1 A No, I did not.
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- 2 Q Did you know what they all did?
- 3 A No.
- 4 Q Did you know what they all had done?
- 5 A No.
- 6 Q Was there someone known as Dr. Siad
- 7 Hussein (phonetic) working there?
- 8 A There could have been. I have no idea.
- 9 Q Certainly if such a person did work there
- in the period of '90 to '91 you don't have any
- idea what he might have been doing?
- 12 A I have no idea.
- 13 Q And you have no idea what Mr. Singh was
- doing during that period of time?
- 15 A No, sir.
- 16 Q Now, at one point Mr. Howard made a
- 17 presentation to Swift-Eckrich, is that right?
- 18 A Yes.
- 19 Q And was it your understanding at the time
- that the purpose of that demonstration was to sell
- 21 Swift-Eckrich an oven?
- 22 A Not exactly. To sell an oven or the
- 23 process?
- Q To sell a process.
- 25 A To sell a process and an oven to do that

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1 process.
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- Q All right. Now, the oven that Mr. --
- 3 first of all, Mr. Howard at the time was
- 4 representing Unitherm, and Unitherm was in the
- 5 business of selling ovens, correct?
- 6 A They sold ovens, but they also sold
- 7 processes that the ovens were able to -- to do.
- 8 Q Now, there was a particular type of an
- 9 oven which Mr. Howard was attempting to sell
- 10 Swift-Eckrich at the time, is that right?
- 11 A Yes.
- 12 Q Was that called a Rapidflow oven?
- 13 A That is correct.
- 14 Q And were you familiar with the Rapidflow
- 15 oven?
- 16 A Yes.
- 17 Q Now, the Rapidflow oven could be used to
- do a variety of different things in the food
- 19 processing industry, is that correct?
- 20 A Yes.
- 21 Q Besides just --
- 22 A Yes.
- 23 Q -- browning turkey breasts?
- 24 A Yes.
- Q And there was no particular process that

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that oven would perform as opposed to many other
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- processes, isn't that right?
- A I'm not sure of --
- 4 O Let me see if I --
- 5 A -- the way you're proposing that
- 6 question.
- 7 Q -- can make that more clear.
- 8 This wasn't a situation where you just
- y turn on the oven and perform the process, was it?
- In other words, you could use that same oven to
- perform many different processes?
- 12 A That is correct.
- 13 Q All right. Now, was there anything --
- what kind of an oven was this, the Rapidflow oven?
- 15 A It was an oven that -- was it -- it used
- 16 convection to -- to -- to do certain things.
- 17 O Was it an electric oven?
- 18 A Yes.
- 19 O Were most ovens at that time used in the
- 20 food processing industry gas ovens?
- 21 A There were gas ovens used.
- Q Were there more gas ovens used than
- 23 electric ovens?
- 24 A I couldn't tell you.
- 25 Q So you don't know whether this oven was

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1 unusual or not as a result of it being a gas -- an
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- 2 electric oven?
- A It was an oven that performed a function
- 4 of a process.
- Now, at the time that you joined
- 6 Swift-Eckrich as president, that company was
- 7 already in the business of selling browned turkey
- 8 breasts, isn't that right?
- 9 A That is correct.
- 10 Q And so it had a process for doing that,
- 11 correct?
- 12 A They had a process for doing, that is
- 13 correct.
- 14 Q And that process was performed at
- something called the Jonesboro plant?
- 16 A That is correct.
- 17 Q Before you met with Mr. Howard did you go
- 18 to Jonesboro and look at that process?
- 19 A Yes.
- 20 Q And what kind of a process was that? Can
- 21 you describe it to us?
- 22 A That process was putting the meat onto
- 23 racks, moving them into stationary batch
- 24 smokehouses, browning them for several hours in
- 25 the smokehouse, bringing them out, chilling them

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and repackaging them.
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- Q Did Swift-Eckrich use a process to brown
- 3 turkey breasts referred to as the caramelization
- 4 process?
- 5 A Yes.
- 6 Q Is that the process you're talking about
- 7 now?
- 8 A Not necessarily.
- 9 Q Did Swift-Eckrich use a caramelization
- 10 process in which turkey breasts to be browned were
- 11 placed on a conveyer which carried those breasts
- 12 through an oven?
- 13 A Yes.
- 14 Q And that was a continuous process, right?
- 15 A That was a continuous -- a slow,
- 16 continuous process.
- 17 Q All right. How did that process differ
- from the one that Mr. Howard talked about when he
- 19 put on his demonstration?
- 20 A That process was considerably slower and
- 21 didn't turn out the product that was turned out by
- this oven.
- Q Well, when you give me that answer, Mr.
- 24 Howard (sic) you're --
- 25 A Mikelberg.

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1 Q I'm sorry. -- Mr. Mikelberg, you're
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- speaking in terms of the result. But could you
- 3 tell me what was different about the process
- 4 itself in technical terms?
- A No, I can't, because I don't know exactly
- 6 what that process was.
- 7 Q Now, we talked today about a pyrolysis
- 8 product, do you recall that?
- 9 A Right, I recall.
- 10 Q Do you know what a pyrolysis product is?
- 11 A It's something that enhances -- when heat
- is applied to it, it enhances the action of the
- 13 heat.
- 14 Q Now, in the caramelization process that
- 15 Swift-Eckrich used before the time that Mr. Howard
- got there, wasn't caramel applied?
- 17 A Sugars of -- sugars of some kind were
- 18 applied.
- 19 Q And that did promote the browning of the
- 20 process, of the surface, correct?
- 21 A Not -- not in the same manner at all.
- 22 O But it did -- it did --
- 23 A It tended to bronze the surface of the
- 24 product but not in the same manner.
- 25 Q Now, is caramel a pyrolysis product?

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1 A I could not tell you that. The first
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- 2 time I heard the term pyrolysis was today.
- 3 Q Now, when Mr. Howard put on his
- demonstration, did he use a pyrolysis product?
- 5 A I cannot remember.
- 6 Q You looked before at the patent, correct?
- 7 A That is correct.
- 8 Q Do you still have that in front of you?
- 9 A Yes.
- 10 O What is the Exhibit Number?
- 11 A Exhibit Number 5.
- 12 Q All right. Now, Mr. Bailey directed your
- attention to the first sentence of the word -- of
- 14 the abstract. And you see in there it talks about
- 15 a pyrolysis product?
- 16 A Right.
- 17 Q Now, would it be fair to say that you
- don't know whether the process that Mr. Howard
- demonstrated complies with that first sentence in
- using a pyrolysis product?
- 21 A Well, it was explained to me the
- 22 pyrolysis product was something to enhance the
- 23 browning of it.
- Q Well, I think we just said that caramel
- enhances the browning, doesn't it?

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1 A Is that a -- is caramel a pyrolysis
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- 2 product? As far as I -- as I say, the first time
- 3 I ever heard the word pyrolysis was today.
- 4 Q So in other words, you don't know whether
- 5 the process that Mr. Howard demonstrated used the
- 6 pyrolysis product or not?
- 7 A If caramel is a pyrolysis product, then
- 8 it did use that. It depended upon what flavor
- 9 they wanted to put onto the product, whether it be
- smoke or whether it be caramel or whether it be
- some other glazing-type product that would bake
- 12 into the surface quickly.
- 13 Q Are you familiar with a company known as
- 14 Red Arrow?
- 15 A Yes.
- Q What do they make?
- 17 A Liquid smoke.
- 18 Q At the time that Mr. Howard put on his
- demonstration for Swift-Eckrich, had Swift-Eckrich
- 20 already been speaking with Red Arrow about the use
- of liquid smoke?
- 22 A Yes.
- Q Do you know what manner of using liquid
- 24 smoke might have been under consideration in
- connection with those discussions?

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1 A I wasn't in the discussions, but I knew
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- 2 there were discussions because we were using
- 3 liquid smoke from Red Arrow and several other
- 4 factories.
- 5 Q Do you know whether ConAgra had discussed
- 6 with Red Arrow the use of liquid smoke in
- 7 accordance with the patent that you have before
- 8 you?
- 9 A No.
- 10 O Prior --
- 11 A I know nothing -- I know nothing of this
- 12 patent here that ConAgra had.
- 13 Q Do you know whether the process that was
- demonstrated by Mr. Howard differed in any way
- from processes that Swift-Eckrich had already
- 16 discussed with Red Arrow?
- 17 A I could not tell you that. I don't know
- 18 what they discussed with Red Arrow.
- 19 Q When Mr. Howard conducted this
- demonstration was there any agreement on the part
- of Swift-Eckrich that the process would be kept
- 22 secret?
- 23 A Repeat the question.
- Q Sure. When Mr. Howard put on his
- demonstration of the process for Swift-Eckrich,

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did Swift-Eckrich agree that it would keep secret
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- 2 whatever it learned from Mr. Howard?
- 3 A Not in writing.
- 4 Q Did it agree not in writing?
- 5 A It wouldn't have been to our advantage
- 6 not to keep it secret.
- 7 Q Well, but that's not exactly my question.
- 8 My question is, did you make an agreement with
- 9 Unitherm that you would keep it secret?
- 10 A No.
- 11 Q You mentioned earlier in your testimony
- something about applying what you called liquid
- smoke, do you recall that?
- 14 A Yes.
- 15 Q Now, when you're going to smoke a
- 16 product, one way to do it is to expose that
- 17 product to real smoke as a -- as we get from a
- 18 fire?
- 19 A That is correct.
- 20 Q And another way to do it is as a
- substitute to apply liquid smoke, correct?
- 22 A Yes --
- 23 O Now --
- 24 A -- in several different manners. It is
- considered not liquid smoke if it's atomized onto

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1 the product.
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- Q Are there advantages to using liquid
- 3 smoke instead of real smoke?
- 4 A Yes.
- 5 Q And what are they?
- 6 A They're environmental. That
- 7 environmentally when you use real smoke, it's --
- 8 the smoke is sent out into the atmosphere. With
- 9 liquid smoke we don't have this environmental
- 10 problem. Also liquid smoke in general is easier
- 11 to control the color.
- 12 Q Now, you mentioned that at some point you
- instructed the people at R&D to make use of the
- Rapidflow oven to produce the best product they
- 15 could, is that correct, sir?
- 16 A To take -- refine the process and use it
- through the oven to make the best product they
- 18 could.
- 19 Q But that was your instruction, to make
- 20 the best product --
- 21 A Product you could.
- 22 Q And you were the president of the
- 23 company, and --
- 24 A That is correct.
- 25 Q And they did it, right?

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1 A As far as I was concerned they did it.
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- 2 Q Now, in order to do that did they have to
- 3 use real smoke instead of liquid smoke?
- 4 A I don't know.
- 5 Q If they did use liquid smoke would there
- 6 be anything -- excuse me, if they did use real
- 5 smoke instead of liquid smoke would there be
- anything objectionable about that, so far as you
- 9 know?
- 10 A Whether they used real smoke or liquid
- 11 smoke --
- 12 Q Yes.
- A -- and it had made the right product?
- 14 Q Yes.
- 15 A No, there wouldn't be anything
- 16 objectionable.
- 17 Q Well, do you know of any particular
- problems involved when you try to use real smoke
- 19 with an electric oven?
- A No, I do not.
- 21 Q Is there a fire hazard associated with
- 22 that?
- 23 A I do not know.
- Q Now, you said before that they were able
- to produce, that is R&D, the research and

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development department at Swift-Eckrich was able
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- 2 to produce a product that you found to be
- 3 acceptable, correct?
- 4 A Yes.
- 5 Q Do you know whether they were able to
- 6 produce that product in such a way that it didn't
- 7 create a fire hazard?
- 8 A I would assume so.
- 9 Q Why would you assume that?
- 10 A Because why would we make a product that
- 11 had a fire hazard to it?
- 12 Q Well, you never actually made the
- 13 product, did you?
- 14 A I would -- I would think that we would
- 15 not make -- I would assume that we would not make
- 16 a product that had a fire hazard to it.
- 17 Q So if in order to make an acceptable
- 18 product using the Unitherm oven you had to create
- 19 a condition in which there was a fire hazard, that
- 20 would be a reason for rejecting that oven,
- 21 wouldn't it not?
- 22 A If it created a fire hazard, yes.
- 23 Q All right. Have you ever spoken to
- 24 people outside of Swift-Eckrich who have purchased
- electric Rapidflow ovens from Unitherm?

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1 A No.
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- 2 Q You don't know whether they're satisfied
- 3 with those ovens or not?
- A I couldn't tell you whether they're
- 5 satisfied or not.
- 6 Q Now, was someone in the research and
- 7 development department of Swift-Eckrich given the
- 8 responsibility for evaluating the Unitherm
- 9 Rapidflow oven?
- 10 A Yes.
- 11 Q Who was that?
- 12 A I would assume it would have been J. B.
- 13 Weatherspoon.
- Q Well, now, J. B. Weatherspoon was the
- 15 head of R&D at the time?
- 16 A Right.
- 17 O Was he --
- 18 A So I held him responsible.
- 19 Q But did he actually do the tests and
- 20 evaluations himself, or did he delegate that to
- 21 someone?
- 22 A He delegated that.
- 23 O And to who did he delegate that?
- 24 A I could not tell you for sure.
- Q Was it Prem Singh?

- 1 A It's possible.
- 2 Q Whoever it was that had the
- 3 responsibility for checking out that oven didn't
- 4 report to you, did they?
- 5 A No. They reported to J. B. Weatherspoon.
- 6 Q You mentioned that Unitherm put on a
- 7 demonstration of a process to -- for the benefit
- 8. of Thorn Apple Valley before he came to
- 9 Swift-Eckrich, is that right?
- 10 A Repeat that question.
- 11 Q Sure. Before Mr. Howard conducted a
- demonstration using his oven for the benefit of
- 13 Swift-Eckrich he had put on a similar
- demonstration for Thorn Apple Valley, is that
- 15 right?
- 16 A I could not tell you that. Demonstration
- 17 meaning he brought the oven in and showed what it
- 18 would do?
- 19 Q Did he make a presentation to Thorn Apple
- 20 Valley relating to this oven?
- 21 A Yes.
- Q And that was while you were there?
- 23 A Yes.
- 24 Q And did he explain the process to which
- that oven would be used to brown turkey breasts?

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1 A That is correct.
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- 2 Q And was that the same process that he
- 3 presented later on to Swift-Eckrich?
- 4 A It seems like it was.
- 5 Q At the time you presented that process to
- 6 Thorn Apple Valley was there any agreement on the
- 7 part of Thorn Apple Valley to keep the process a
- 8 secret?
- 9 A Not that I know of.
- 10 Q When Mr. Howard presented this process to
- Swift-Eckrich, did he suggest using Maillose as
- 12 the browning liquid?
- 13 A Not that -- not to me he did not.
- 14 Q Did he say what browning liquid should be
- 15 used?
- 16 A Not to me.
- 17 Q When the tests using the Unitherm oven
- 18 were done at Swift-Eckrich, was Red Arrow involved
- in those tests?
- 20 A I think so.
- Q Why were they involved?
- 22 A I think they were working with David at
- 23 that time to produce a product for this -- for
- this oven that would be effective in the oven.
- Q And was Red Arrow also working with

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1 Swift-Eckrich toward that same end prior to the
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- 2 time that Mr. Howard made this presentation?
- 3 A I could not make that statement.
- 4 Q You don't know one way or the other?
- 5 A I don't -- I certainly do not know.
- 6 Q Are you familiar with patents?
- 7 A That's not my area of expertise.
- 8 Q Do you know how to determine what the
- 9 invention that is claimed in a patent is?
- 10 A No. As I say, I'm not familiar with
- 11 patents.
- 12 Q I'm not suggesting you should be, sir. I
- 13 just wanted to know.
- 14 A I don't ask you to make high thoughts,
- 15 and you don't...
- 16 Q Now, you said that Mr. Singh, Prem Singh,
- went to Europe, and while there he visited
- 18 Unitherm, is that correct?
- 19 A Right.
- 20 Q Was, it the purpose of that visit to have
- 21 Mr. Singh evaluate the Unitherm oven?
- 22 A No. He was studying radio frequency
- 23 cooking at that time.
- Q All right. What is radio frequency
- 25 cooking?

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1 A It's a high-speed method of cooking meat.
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- 2 O It's a different method from the one
- 3 that --
- 4 A It has nothing to do with that at all.
- 5 Q And that was why Mr. Singh went to --
- 6 A That is correct.
- 7 Q -- to Europe?
- 8 At that time was Unitherm trying to
- 9 develop a radio frequency oven?
- 10 A Yes.
- 11 Q Do you know whether they ever perfected
- 12 that oven to such an extent that it could be used
- 13 commercially?
- 14 A No, I don't know.
- 15 Q Did they offer it to Swift-Eckrich?
- 16 A They offered an idea to Swift-Eckrich for
- 17 this.
- 18 Q Could you explain what you mean by
- "offered an idea?"
- 20 A Well, they offered the opportunity or an
- 21 idea that they could develop a method of radio
- frequency cooking hams and mold and molds for
- 23 slicing.
- Q Now, apart from the demonstration
- relating to turkey breasts that you've told us

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about and apart from this radio frequency cooking,
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- 2 did Mr. Howard offer anything else to
- 3 Swift-Eckrich while you were there?
- 4 A He offered a method of cooking bacon that
- 5 combined radio frequency with infrared cooking.
- 6 Q Was any arrangement made between
- 7 Swift-Eckrich and Unitherm with respect to that
- 8 process?
- 9 A No arrangement was ever finalized.
- 10 Q And what was the reason for that?
- 11 A It just was a lot of money, and we didn't
- 12 want to -- at that time, and we didn't want to put
- money into new processes and technologies that
- 14 were not proven.
- 15 Q Anything -- any other processes that Mr.
- 16 Howard proposed to Swift-Eckrich other than the
- ones you've told us about?
- 18 A Nothing that I can remember.
- 19 THE VIDEOGRAPHER: Excuse me, Counsel,
- 20 I'm going to go off the record just briefly --
- MR. SCHROEDER: Sure.
- 22 THE VIDEOGRAPHER: -- and change the
- 23 tape --
- MR. SCHROEDER: Go ahead.
- THE VIDEOGRAPHER: -- while you're doing

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1 that.
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- 2 (An off-the-record discussion.)
- 3 Q (By Mr. Schroeder) Were you president of
- 4 Armour Swift-Eckrich in April of 1995?
- 5 A April, just -- just beginning there.
- 6 MR. SCHROEDER: Ask the reporter to mark
- 7 as Defendant's Exhibit 1 -- oh, I'm sorry.
- 8 Are we --
- 9 THE VIDEOGRAPHER: We are back on the
- 10 record.
- MR. SCHROEDER: -- a memo of April 11,
- 12 1995, from Mr. Gutierrez to Mr. Cantu.
- 13 (Defendant's Exhibit No. 1 was
- 14 marked for identification purposes
- and made a part of the record.)
- 16 Q (By Mr. Schroeder) Are you familiar --
- 17 excuse me. Have you got the exhibit?
- 18 A Yeah.
- 19 Q Are you familiar with -- with this memo?
- 20 A No.
- 21 Q Have you ever seen it before?
- 22 A No.
- Q Would you look at the part about
- two-thirds of the way down the page where it lists
- four numbered items, 1 through 4? Would you tell

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1 me if that refreshes your recollection as to any
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- 2 proposals that Unitherm made to Swift-Eckrich?
- 3 A I can't remember what these were that
- 4 David -- I just can't remember that.
- 5 Q Do you remember Mr. --
- 6 A I remember -- I remember David was asked
- 7 to do the pre -- the exact weight smoked sausage.
- 8 The precooked bacon it seems like there was a --
- 9 an inter -- a stacker that he was working with
- 10 Armour Swift-Eckrich with.
- 11 Q Of the four things that are listed here
- in the memorandum, did Mr. Howard succeed in
- selling anything to Swift-Eckrich?
- 14 A I don't remember.
- 15 Q Do you recall Mr. Howard ever saying that
- the Unitherm Rapidflow oven was capable of
- browning turkey breasts without the use of any
- 18 browning agent?
- 19 A Specifically I believe he did, but I'm
- 20 not sure in what connotation.
- 21 Q Did he make that statement at the time of
- 22 his first presentation to Swift-Eckrich in 1993?
- 23 A In '93?
- 24 Q Yes.
- 25 A I couldn't tell you.

- 1 Q He may have?
- 2 A I couldn't tell you.
- 3 Q Do you know whether Swift-Eckrich ever
- 4 tested the Rapidflow oven to find out whether it
- 5 could, in fact, brown turkey breasts without the
- 6 use of a browning agent?
- 7 A It seems that it could.
- 8 Q You think it could brown turkey breasts
- 9 without the use of an agent?
- 10 A Brown, not smoke.
- 11 Q Was that experiment done at
- 12 Swift-Eckrich?
- 13 A I couldn't tell you.
- 14 Q So you don't know whether Swift-Eckrich
- 15 ever made a determination as to whether or not the
- 16 oven actually would do that?
- 17 A I don't know -- I don't remember whether
- they did or they did not. I know that I saw it
- browning when I was in England without any coating
- on it also.
- 21 Q Now, you talked about a smoking process.
- 22 If a process doesn't impart a flavor to the food
- that we associate with smoke, would you then call
- it a smoked product?
- 25 A If there was no smoked flavor?

- 1 Q Yes.
- A And the process doesn't use smoke?
- 3 Q It doesn't use actual smoke.
- 4 A It uses liquid smoke without a smoked
- 5 flavor?
- 6 Q If you want to call that liquid smoke,
- 7 yes.
- 8 A If the liquid smoke is applied you can
- 9 call it smoked.
- 10 Q Even if it doesn't have a smoked flavor?
- 11 A Right. The quality of it -- it's
- 12 strictly quality.
- 13 Q So according to your understanding of the
- terminology, some smoked products have a smoked
- 15 flavor and others do not?
- 16 A Right. I -- you can smoke it right in a
- 17 normal batch oven smokehouse and not have a smoke
- 18 flavor to it.
- 19 Q I think you mentioned that there were two
- 20 engineers from Unitherm who assisted in testing
- 21 the Unitherm oven at Swift-Eckrich, is that true?
- 22 A No, I didn't mention it. I was asked a
- 23 question whether -- no, I didn't never mention
- that there were two engineers.
- Q Well, were there engineers from Unitherm

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who assisted Swift-Eckrich in testing Unitherm --
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- 2 A Yes.
- 3 Q -- Rapidflow oven?
- 4 Did you ever meet them?
- 5 A I cannot remember whether I met them or
- 6 not.
- 7 Q Are you familiar with a Mr. Gatasec
- 8 (phonetic)?
- 9 A No.
- 10 Q How many were there?
- 11 A I never met them.
- 12 Q So you have no way of knowing how many?
- 13 A No.
- Q Do you know whether those engineers were
- brought over from England for this purpose?
- 16 A No.
- 17 Q But there were people other than Mr.
- 18 Howard involved in the part of --
- 19 A Yes.
- 20 Q Now, you mentioned that, I believe that
- 21 Swift-Eckrich kept the Unitherm oven for testing
- longer than had originally been planned?
- 23 A That is correct.
- 24 Q Did Swift-Eckrich pay Unitherm rent for
- 25 that oven?

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1 A Not that I know of.
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- Q Do you know whether they did?
- 3 A No, I don't. I said not that I know of.
- 4 Q So they may have?
- 5 A Yeah. Not that I know of.
- 6 Q Just one other point I'd like to clear
- 7 up, Mr. Mikelberg, because I'm a little confused
- 8 here. I believe you said that at the time of Mr.
- 9 Howard's first presentation of the Rapidflow oven
- 10 to Swift-Eckrich, Swift-Eckrich was using a batch
- 11 process to brown turkey breasts, is that correct?
- 12 A I said in -- in Jonesboro.
- Q And at that time Swift-Eckrich was also
- using a continuous process, not a batch process,
- to brown turkey breasts, is that correct?
- 16 A Yes.
- 17 Q And where was that done?
- 18 A That was in Minnesota. That was at -- I
- 19 can't think of the name of the plant.
- Q Quincy?
- A No, no, no, no, no, no, no, no.
- 22 O Oh.
- 23 A I'm just --
- Q But there was a different plant where
- 25 that --

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1 A Yeah.
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- Q -- where that continuous process was
- 3 used?
- 4 A Right.
- 5 Q And that process used caramel?
- 6 A Right.
- 7 Q Apart from the use of caramel instead of
- 8 Maillose, did that process differ in any way from
- 9 the process that Mr. Howard demonstrated to
- 10 Swift-Eckrich?
- 11 A Yes.
- 12 Q And what was that way?
- 13 A It was considerably slow. It was a
- 14 gas-fired oven. It was -- and it did not crisp
- 15 the outside of it. It was a much longer, lower
- 16 yielding process. I don't believe it was a
- 17 convection oven either, so... It was a much --
- 18 Q On what -- on what do you base your
- 19 knowledge of that caramelization process?
- 20 A On having seen it once.
- 21 Q You saw it one time in what year?
- 22 A I couldn't tell you.
- 23 Q And how long did you spend observing this
- 24 process?
- 25 A Five minutes.

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1 MR. SCHROEDER: I have no further
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- 2 questions.
- 3 <u>FURTHER EXAMINATION</u>
- 4 BY MR. BAILEY:
- 5 Q Mr. Mikelberg, I just want you to help me
- 6 understand who some of the people are in
- 7 Defendant's Exhibit 1. Who is R. Cantu?
- 8 A He was a purchasing agent.
- 9 Q And the memo is from a Mr. -- well, I say
- "Mr.," I don't know that.
- 11 A It's --
- 12 O J. Gutierrez?
- 13 A Yeah. James Gutierrez who was vice
- 14 president of purchasing at that time.
- 15 Q It's dated April 11, 1995, and the first
- 16 paragraph says "A. Mikelberg invited Ted and I to
- 17 meet David Howard, owner and President of this
- 18 company today."
- 19 The earlier exhibits that we marked
- 20 Plaintiffs' Exhibit, oh, 3 and 4, are dated in
- October of '95. Do you recall meeting Mr. Howard
- 22 or inviting Mr. Howard to come to consult with
- 23 Armour Swift-Eckrich back in April of that year?
- 24 A Yeah, I must have just come with the
- company then.

```
1 Q Yeah.
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- 2 A I don't remember -- I don't recall this
- 3 exact meeting here, but I'm sure that it's dated
- 4 and I was there, so...
- 5 Q Did David Howard come to Armour
- 6 Swift-Eckrich more than one time?
- 7 A Yes.
- 8 Q Who are the gentlemen referred -- or the
- 9 people referred to in the fourth paragraph down
- that says "After a brief meeting with Arnie, we
- reconvened with S. Plichta?"
- 12 A Plichta. He's an engineer.
- Q "Prem Singh?"
- 14 A Prem Singh.
- 15 Q "And P. E. Wong?"
- 16 A He's in product development.
- 17 Q "In Ted's office," I take it that's Ted
- 18 Berry?
- 19 A Right.
- 20 Q "After a short review of some of David's
- 21 equipment, Ted asked us to get David involved in
- the following projects." And he lists them there,
- 23 right?
- A (Nodding head.)
- Q And it goes on, "David will have a demo

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cooking unit at IFFA." What is that?
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- 2 A IFFA. That's that show in Frankfurt.
- 3 Q That you spoke of?
- 4 A That's every three years.
- 5 Q "Which he will ship to PDL." What is
- 6 PDL?
- 7 A The product development laboratory.
- 8 Q And is that Armour Swift --
- 9 A Yes.
- 10 Q -- Eckrich's?
- 11 A That is correct.
- MR. BAILEY: Let's go off the record for
- just a moment.
- 14 (A short recess.)
- 15 Q (By Mr. Bailey) Mr. Mikelberg, caramel is
- a stainer rather than a color developer, isn't it?
- 17 A It doesn't develop a color; it puts a
- 18 color on.
- 19 Q Yeah. I mean, you can put caramel on
- 20 without the need of an oven --
- 21 A Right.
- 22 Q -- couldn't you?
- 23 A But the caramelization of sugars is a
- 24 darkener.
- Q It can make it extremely dark for that

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1 matter, can't it?
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- 2 A You can make it any color you -- caramel
- 3 is caramel coloring.
- 4 Q Would you expect David Howard to trust
- 5 you to keep in confidence any business secrets
- 6 that he relayed to you?
- 7 MR. SCHROEDER: Objection; calls for
- 8 speculation.
- 9 Q (By Mr. Bailey) You may answer.
- 10 A Do I -- do I think -- over the years I've
- 11 been dealing with David I've never done anything
- that would suggest anything different.
- MR. BAILEY: Thank you, Mr. Mikelberg. I
- 14 have no further questions.
- 15 FURTHER EXAMINATION
- 16 BY MR. SCHROEDER:
- 17 Q Very briefly, Mr. Mikelberg, when Mr.
- 18 Howard made his presentation to Swift-Eckrich
- while you were present, the information that he
- 20 gave to Swift-Eckrich was given to other people
- 21 besides yourself, is that right?
- 22 A That is correct.
- Q How many other people besides yourself?
- 24 A I couldn't answer.
- Q Well, was it more than five?

```
1
           Α
                 I couldn't answer that.
 2
                Was anything done to instruct any of
       these other people that they were to keep secret
 3
       information that they received from Mr. --
           Α
 5
                I have no -- I have no knowledge of
       anything.
 6
                You did not give any such instruction?
                No, I did not.
 8
           Α
 9
                MR. SCHROEDER: Thank you.
10
                MR. BAILEY: Mr. Mikelberg, you may read
11
       this deposition and sign it, correct any errors
12
       you think the court reporter might have made, or
       you can waive the reading and signing of it.
13
       Which do you choose to do?
14
15
                THE WITNESS: I'll waive -- I'll waive
       it.
16
                MR. BAILEY: Okay. We will offer
17
       Exhibits -- Plaintiffs' Exhibits 1 through 5 as
18
       exhibits to the deposition.
19
20
                (Deposition concluded.)
21
22
23
24
25
```

CERTIFICATE

STATE OF OKLAHOMA)

SS:
COUNTY OF OKLAHOMA)

I, Jenni L. Gunter, a certified shorthand reporter within and for the State of Oklahoma, certify that ARNOLD S. MIKELBERG was sworn to testify the truth; that the deposition was taken by me in stenotype and thereafter transcribed by computer and is a true and correct transcript of the testimony of the witness; that the deposition was taken on September 7, 2001, at 11:20 a.m., at 100 North Broadway, Suite 1700, Oklahoma City, Oklahoma; that I am not an attorney for or a relative of either party, or otherwise interested in this action.

Witness my hand and seal of office on September 14, 2001.

JEMNÍ L. GUNTER, CSR for the State of Oklahoma CSR #01745

Jenni & Glunton

Jenni L. Grinter () Deporter () July 5 Exp. Duto: Doubling of U1, 2002

UNITHERM STAINLESS STEEL INC.

1680-82 CARMEN DRIVE, ELK GROVE VILLAGE, ILLINOIS, 60007. TEL: 708 806 0454 FAX: 708 806 1321.

Ref: 403L.DPH

F.A.O. Eli Dorfman

Thorn Apple Valley 3925 Tillman Detroit MI 48208

Tel 313 894 6600

15 April 1993

Dear Eli

Recently we ran some trials on browning turkey breasts. The results were highly successful. 94% yield in 14 minutes. If you offer this type of product currently or are considering it for the future we would be pleased to run a trial for you.

Has there been any change in the position of the 1000 moulds you required?

I will be setting up a meeting with Bill Hitzelberger soon to present the Tower press with the 40 moulds in it.

Look forward to speaking with you soon.

Yours sincerely

1

1000

.

David Howard PRESIDENT

c.c. Arni Mikelberg

PLAINTIFF'S DEPOSITION EXHIBIT

U-03293

~9

DAVE ISEEN DOING BUSINESS: W. 74 UNITHERM

OF FOR ENDRYPERS SINCE 1992, While HOLDING THE

POSITIONS OF EXECUTIVE V. P. OF THERM OFFICE UNITY

OF THE OFFICE ONLY

IN ON AND AS PRESIDENT OF ARMUR SWIFT

EXERCISE. AND AS PRESIDENT OF ARMUR SWIFT

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PHIZCHER THIS ROW PERENT FROM UNITHERM TO SHOWE
WHEN JADDUCT FUL BESTEN MARKETT

SOME TIME IN 1925 DT MY REQUEST

TO PRESENTED THIS METHOD EN SMOKING TO ARMOUNT

SWIFT ECKRICA. WE REQUESTED THAT HE SEND

IN THE EQUIPMENT TO OUR PRODUCT PRUNCICIONEU

LAB. IN DOWNER GROUP ILL, WHICH WAS MANSCAD

BY DW J.B. FWIKENESSON. HE SENT THIS EQUIPMENT

TO THE LAB. WHERE IT REMAINED FOR SENGENT

MONTHS TO RUN TESTS ON TURENCY BREGOT.

ARTER THIS JURISTON TO SOURS, METHOD

OPERATORIC MALAMENT MANN COMPAT OF B. S. E.

FOR APPROVAL. IT WAS DECIDED AT THIS TIME.

THE PRODUCT EXCELLENT , T DID NOT MINE THE EXACT CONSOTTINGS OF CHEEKS. PRODUCTION AND THE FOLLOWS WAS SENT BACK TO UNITHERY.

PLAINTIFF'S DEPOSITION EXHIBIT

U-04748

August 18, 2000

I have been doing business with Unitherm for eight years, since 1992, while holding the positions of Executive Vice President of Thorn Apple Valley Inc., as President of Armour Swift-Eckrich, and as President of Arnold S. Mikelberg Associates, a consulting company.

In 1994 David Howard, President of Unitherm, presented to myself as Executive Vice President of Thorn Apple Valley a method he had developed to quickly smoke ham or turkey on a communous in-line operation. Thorn Apple Valley at a later date purchased this equipment from Unitherm to smoke ham product for Boston Markets.

Some time in 1995, at my request, David presented this method for smoking to Armour Swift-Eckrich. We requested that he send the equipment to our product development lab in Downers Grove, Illinois, which was managed by Dr. J. B. Weatherspoon. The equipment was sent to the lab, where it remained for several months to run tests on turkey breast.

After this period of time, samples of product were presented to sales, marketing, and operations management of Armour Swift-Eckrich for approval. It was decided at this time not to proceed with the project. The product was excellent, but it did not have the exact consistency of current production and the equipment was sent back to Unitherm.

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ARNI On One		Phone 6		
Fex 847	564-08	061		

UNITHERM FOOD SYSTEMS !NCORPORATED 1108-WEST HARTFORD PONCA CITY, OKLAHON:A 74601 TELEPHONE: 405-762-0197 FAX: 405-762-0199



October 9,1995

Arni Mikelberg
Ted Berry
ARMOUR SWIFT ECKRICH
2001 Butterfield Road
Downers Grove, IL 60515

RE: New Innovations

Dear Sirs

There are three areas I believe we can impact the profitability of your company.

- 1) Bacon cooking and handling.
- 2) Ham cooking using radio frequency:
- 3) In-line smoking.

Your concern on developing 1 and 2 is understood. These are challenging areas and we do need to be cautious. Nonetheless your enthusiasm for improvements in these areas is well aimed. I will have proposals in the next 4-6 weeks.

The smoke process, (3) we have already developed. We have a question mark on the marketability of it and value your input.

The objectives of the trial are as follows:

- 1) Unitherm will supply a 2 zone Rapidflow for a two-week period.
- 2) Unitherm seek to prove uniform smoking in less than ten minutes.
- 3) The shrink should be 1-3%
- 4) The color should match or better your existing product.



U-03502

- 5) On success of the above, Armour Swift Eckridge will purchase the line.
- 6) Armour Swift Eckrich will share all test data with Unitherm.
- 7) Unitherm will license Armour Swift Eckrich with the process for a 50% of the return on investment, exclusively.

Sirs, I look forward to concluding the above in the next few weeks. I believe that the above correctly reflects our agreement

Yours sincerely,

David Howard

President

UNITHERM FOOD SYSTEMS INCORPORATED 1108 WEST HARTFORD

PONCA CITY, OKLAHOMA 74601 TELEPHONE: 405-762-0197 X: 405-762-0199





October 16, 1995

Prem Singh Armour Swift Eckrich 2001 Butterfield Road Downers Grove, IL 60515

We are shipping the Rapid Flow on Friday, the 20th of October. It will be delivered to you on Monday, the 23rd. Two of Unitherm's engineers will be on site to help install the oven. The arrangement we discussed for the trial was that Armour Swift Eckrich would pay for the transport and commissioning engineers. I would appreciate your assistance in making sure we have a purchase order to invoice this against.

The specific criteria for the trial was:

- Liquid smoke application for turkey breasts.
 Dwell time 7.5 minutes at 3300 C.
 Internal temperature will rise by 10 C.
 1% Shrinkage.
- 2) Browning turkey breasts with skin on.Dwell time 15 minutes at 3300 C.5% shrinkage.(No glaze.)
- 3) Glazing both hams and turkeys. Dwell time 3 minutes at 3300 C.
- 4) Cooking of full turkeys i.e. nominal 12-14 lbs. Cook time 1 hour 50 minutes at 2500 C.
- Any other products you with to try. Philly cheese steak beef.
 Sausage links.
 Patties, etc.



U-03520

Jim Gaydusek and I will help you understand the oven and offer guidance for various products.

Site Requirements:

Electric

232 KW

Steam

50 kg/hr @ 6-8 bar

Exhaust

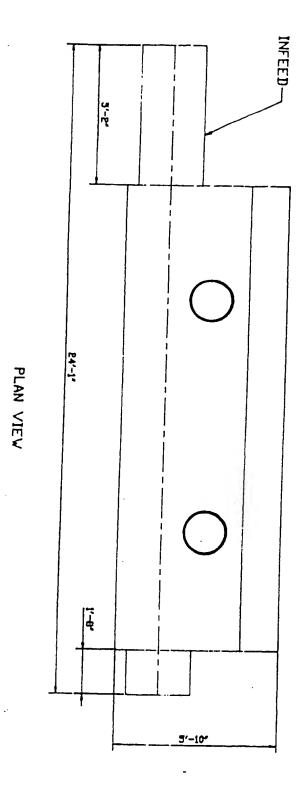
1800 cfm/Fan

Foot print 2-zone Rapid Flow

Regards,

David Howard

President



U-03522

United States Patent [19]		[11]	US0059: Patent Num	
Sing	gh	[45]	Date of Pate	ent: Sep. 14, 1999
[54]	METHOD FOR BROWNING PRECOOKED.	4,753,8	09 6/1988 Webl	b 426/315 X
	WHOLE MUSCLE MEAT PRODUCTS	4,810,5 4,876,1	10 3/1989 Leve	r et al 426/315 X erwood et al 426/650
[75]	Inventor: Prem S. Singh, Glen Ellyn, Ili.	4,882,1 4,968,5	84 11/1989 Buck	tholz et al 426/262 X ke et al 426/262 X
[73]	Assignee: Swift-Eckrich, Inc., Downers Grove, Ill.	4,985,2 4,994,2 5,013,5	61 1/1991 Kang 97 2/1991 Unde	g et al
[21]	Appl. No.: 09/075,608	5,039,5 5,292,5	37 8/1991 Unde 41 3/1994 Unde	erwood 426/271 erwood et al 426/250
[22]	Filed: May 11, 1998	5,397,5 5,429,8	31 7/1995 Willia	erwood et al 426/250 ams et al 426/92
51]	Int. Cl. ⁶ A23L 1/025; A23B 4/044	5,762,9	85 6/1998 Eisele	e 426/315
[52]	U.S. Cl		caminer—Milton (gent, or Firm—P	Cano retty, Schroeder & Poplawski
	426/644; 426/645; 426/647; 426/652	[57]	ABST	ΓRACT

[56] References Cited

U.S. PATENT DOCUMENTS

[58] Field of Search 426/92, 103, 237,

426/241, 242, 248, 250, 262, 268, 270,

293, 302, 305, 315, 641, 643, 644, 645,

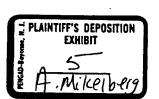
647, 652, 240

1,280,772	10/1918	Legg
3.106.473	10/1963	Colgin
4,372,981	2/1983	Lieberman 426/315 X
4,657,765	4/1987	Nicholson et al 426/262 X

ABSTRACT

A method of producing a crisp surface and imparting a uniform golden-brown color to a precooked whole muscle meat product by coating at least a portion of the surface of a precooked whole muscle meat product with a browning liquid pyrolysis product. The coated surface is then exposed to an energy source that selectively heats the coated surface of the whole muscle meat product at a temperature and for a time sufficient to develop a golden-brown color on the exposed surface, without substantially shrinking the precooked whole muscle meat product.

36 Claims, No Drawings



METHOD FOR BROWNING PRECOOKED, WHOLE MUSCLE MEAT PRODUCTS

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a method for preparing food products. In particular, it relates to a method for browning precooked, whole meat muscle products.

2. Description of Related Art

There exists a strong consumer demand for precooked, whole muscle meat products, such as precooked meat, poultry, and fish products having the appearance, texture, and taste of products that are naturally smoked or baked or roasted in a home-style oven. For example, consumers place 15 baked or roasted in a home-style oven. a premium on precooked, whole muscle meat products that have the same golden brown color, crisp surface, and moist interior as their home-cooked counterparts.

While the consumer demand for such precooked products is dramatically increasing because of the products' convenience, consumers also demand that these products be healthful, nutritional, and low in fat. Consequently, to satisfy these sometimes conflicting demands, and to be successful in the marketplace, products must not only have the appearance, texture, and taste of their home-cooked 25 counterparts, but they also must be wholesome.

It has proved especially difficult to prepare precooked, whole muscle meat products, such as precooked deli turkey breasts, chicken nuggets, pork chops, and the like having a golden brown color on a crispy surface. A conventional approach has been to deep fry these products in various kinds of edible seed oils such as cotton seed oil, peanut oil, corn oil, coconut oil, sunflower seed oil, etc. at temperatures in the range of from about 300° to about 450° F. (from about 150° to about 230° C.). Deep frying produces a desirable browning on the surface of the meat product through a reaction known as the Maillard Browning Reaction. The Maillard Browning Reaction takes place when common elements of the food product, such as amino acids, sugars, collagen and even minerals, react in a complex manner. Furthermore, deep frying produces a crisp surface while leaving a moist interior.

There are numerous drawbacks to deep-frying foods, however. They include a residual oily flavor and mouthful, 45 effective method for browning mild-flavored or flavorless as well as the adverse characterization of the product as being a high fat product, because of the oil that remains embedded in the product's surface. Moreover, the oil can degrade over time, thereby, affecting the product's shelf-life and taste. The use of the high-temperature oil also gives rise to safety concerns, by creating the potential for fires or burns.

Another conventional approach to browning precooked, whole muscle meat products begins with the application to the surface of the meat products of certain browning liquids 55 produced by pyrolyzing wood or cellulose, such as "liquid smokes." The pyrolysis products develop a brown color on the product surface when the coated product is heated for about two hours to about six hours in a batch-type oven at about 50° to about 100° C₂) or for about ten minutes to about forty-five minutes in a circulating air oven or impingement air oven at a temperature from about 250° to about 600° F. (from about 120° to about 320° C.). Useful liquid smoke products are disclosed in Hollenbeck U.S. Pat. No. 3,106, 65 473 and Underwood U.S. Pat. No. 4,876,108. The pyrolysis products, however, impart a smoky taste. Obviously, there

2

are delicately flavored meat products, such as poultry and fish products, where a smoke flavor is not desired, so that the use of liquid smokes does not provide a viable alternative.

Recently, there have been developed browning liquid 5 pyrolysis products from sugars, such as fructose and dextrose. The smoky taste of the sugar pyrolysis products is greatly reduced, but not always eliminated. These products are described in Underwood U.S. Pat. Nos. 5,397,582, 5,292,541, 5,039,537, and 4,994,297. For example, U.S. Pat. 10 No. 5,397,582 describes coating a precooked sausage and then browning the coated sausage by heating in a microwave oven for about two minutes. While the sausage is browned by the sugar pyrolysis products, the color is not the golden brown associated with products that are naturally smoked or

Significant drawbacks remain with the conventional method of browning whole meat muscle products, even with these sugar pyrolysis products. Not only does their residual taste remain factor, but after being heated to temperatures of from about 120° to about 600° F., the meat products lose a significant amount of water that can adversely affect their taste and appearance.

Further, the uniformity of browning obtained the with pyrolysis products and the retention and stability of the brown coating, as well as the color itself, is less than desirable. Still further, because the whole meat muscle products are heated at elevated temperatures for relatively long periods of time, the growth of microbes is facilitated, thus decreasing the shelf-life of the browned whole muscle products. It is a further disadvantage of heating whole meat muscle products at elevated temperatures for relatively long periods of time that large amounts of heat are captured by the product. The product must then be chilled, i.e., the large amount of heat removed. Typically, chilling requires a lengthy, capital-intensive chill tunnel.

Thus, there remains a definite need for an effective method for browning precooked, whole muscle meat products to produce products having the appearance, texture, and 40 taste of their naturally smoked or home-style baked or roasted counterparts. There remains a further definite need for an effective method for crisping and browning the surface of precooked, whole muscle meat products without deep frying. There remains a still further definite need for an precooked, whole muscle meat products without imparting a smokey or other unwanted flavor. There remains a still further definite need for an effective method for crisping and browning the surface of precooked, whole muscle meat products that does not cause the products to shrink and their interior to become dried-out. There remains a still further definite need for an effective method for preparing whole muscle meat products having a uniform golden-brown color that is stable and retained throughout the life of the product. There remains a still further definite need for an effective method for crisping and browning a whole muscle meat product that does not adversely affect the shelf-life of the meat product and does not require the removal of great amounts of heat to chill the product. The present invention a temperature of from about 120° to about 212° F. (from 60 satisfies these and other needs and provides further related advantages.

SUMMARY OF THE INVENTION

The present invention, which addresses the above needs is embodied in a method of producing a crisp surface and imparting a uniform golden-brown color that is stable and retained throughout the life of a precooked, whole muscle

meat product without imparting an objectionable smoky flavor, without forming an oily surface, without substantially shrinking the meat product, and without adversely affecting the shelf-life of the meat product, but instead, increasing the shelf-life and sensory quality of the product. In some embodiments, a precooked whole muscle meat product, including a poultry product, such as a turkey breast, a chicken breast, or chicken nugget, a ham product, a pork product, or a fish product, is pre-dried to remove free water from its surface. In accordance with the inventive method, at 10 least a portion of the surface of the pre-cooked whole muscle meat product is coated with a browning liquid pyrolysis product. The coated surface is then exposed to an energy source that selectively heats the coated surface of the whole muscle meat product at a temperature and for a time suffi- 15 cient to develop a golden brown color on the exposed surface, without substantial shrinkage of the precooked, whole muscle meat product.

Suitable energy sources include circulating air ovens, impinging air ovens, laser light sources, medium wavelength energy infra red radiation sources, and sources of microwave radiation. In some embodiments, the energy sources create an environment having a temperature greater than about 60° C. And in some embodiments, the temperature at the core of the meat product is initially less than about 5° C., while after the meat product has been browned, the temperature at the core of the meat product remains at less than about 13° C.

In some embodiments, the browning liquid pyrolysis product is obtained from the pyrolysis of hardwoods or sugars, including dextrose, and from about 0.05 to about 1.0 wt. %, based on the weight of the precooked, whole muscle meat product, of the browning liquid is applied to the surface of the meat product. Also in some embodiments, the browning liquid pyrolysis product contains a masking agent or flavoring enhancing composition. In some embodiments where the whole muscle meat product is a turkey breast, the browning liquid pyrolysis product contains from about 0.5 to about 15 wt. % turkey flavor or turkey broth or a mixture of the two as the masking agent or flavoring enhancing composition.

Other features and advantages of the present invention will become apparent from the following detailed description, which illustrates by way of example, the principles of the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Any whole meat muscle product can be advantageously browned in accordance with the invention. Representative 50 whole meat muscle products include poultry, meat, and fish products, such as turkey breasts, chicken breasts, chicken nuggets, ham products, pork products, and the like. The whole meat muscle products can be precooked by any conventional method. Typical methods include initially 55 stuffing a raw whole muscle meat product into a polymeric bag and then sealing the bag. Alternatively, the raw whole muscle meat product is formed in a mold. The raw meat product is then cooked in a smoke house, or steam box, or circulating air oven. After cooking, the whole muscle meat 60 product is chilled by showering with cold water followed by cooling with chilled air to reduce its equilibrium temperature to less than about 40° F. (less than about 5° C.). The thus precooked, chilled, whole muscle meat product is then removed from the polymeric bag or mold.

In some embodiments, the precooked, whole muscle meat product is then placed on a continuously moving conveyor 4

and transported past a series of hot water (e.g., from about 90° to about 212° F.) or steam showers for a period of from about ten to about thirty seconds. The showers remove the gelatin purge formed on the surface of the meat product during cooking. It has been found that the inventive method is more effective if the browning liquid pyrolysis product it applied directly to the surface of the whole muscle meat product and not to an intermediate gelatin layer. Direct application promotes penetration of the browning liquid pyrolysis product into the meat tissue and facilitates the subsequent Maillard Browning Reaction.

After the gelatin purge is removed, the meat product is predried by circulating hot air around the product or by exposing the product to infra-red radiation. It is also been found that when the free water on the surface of the meat product is removed by predrying, the Maillard Browning Reaction is enhanced.

At least a portion of the surface of the thus dried, precooked, whole meat muscle product is then coated with one or more of any suitable browning liquid pyrolysis product, such as the browning liquid pyrolysis products commercially available from Red Arrow Products Company. Inc. Manitowoc, Wis. and described in Hollenbeck U.S. Pat. No. 3,106,473 and Underwood U.S. Pat. Nos. 5,397,582, 5,292,541, 5,039,537, 4,994,297, 4,876,108, which patents are herein incorporated by reference. Products useful in accordance with the inventive method include browning liquids obtained from the pyrolysis of hardwoods such as ST-300 liquid smoke and SELECT 24P liquid smoke both available form Red Arrow Products Company, Inc. Manitowoc, Wis., as well as browning liquids obtained from the pyrolysis of sugars such as MAILLOSE carmel coloring, also available from Red Arrow Products Company, Inc. Manitowoc, Wis.

The concentration of the commercially available products varies depending on the particular browning liquid pyrolysis product, the particular whole muscle meat product to be treated, the particular conditions for the Maillard Browning Reaction, and the desired final color. For example, Maillose is used without any dilution up to about 80 vol. % dilution with water. The higher the concentration of the Maillose or other browning liquid pyrolysis product, the darker goldenbrown the final, whole meat muscle product.

In some embodiments, a masking agent or flavoring enhancing composition is included with the browning liquid. For example, in those embodiments where the meat product is a precooked turkey breast, from about 0.5 to about 15 wt. % turkey flavor or turkey broth or a mixture of the two can be added to the browning liquid. Honey and other flavors can also be added to the browning liquid to give a roasted aroma and enhance the flavor of the final product.

The browning liquid is applied to at least a portion of the surface of the precooked, whole muscle meat product by any suitable method, such as by dipping, brushing or spraying. The amount of browning liquid to be applied to the surface will depend on the particular combination of browning liquid, meat product, and color desired. The amount will be readily determinable by one skilled in the art without undue experimentation. Typically, the amount of browning liquid ranges from about 0.05 to about 1.0 wt. %, preferably from about 0.1 to about 0.8 wt. %, and more preferably from about 0.15 wt. % to about 0.3 wt. %, based on the weight of the precooked, whole muscle meat product.

The surface of the meat product is then browned and crisped using an energy source that selectively heats the thus coated surface. In preferred embodiments, the energy source

selectively heats and dehydrates the surface of the meat product by creating an environment having a temperature greater than about 60° C., preferably from about 100° C. to about 290° C., and more preferably from about 150° C. to about 260° C. In those embodiments where the precooked meat product has been kept at its chilled equilibrium temperature of less than about 5° C., the selective heating maintains the core of the meat product at a temperature less than about 13° C., preferably less than about 8° C., and most preferably less than about 5° C.

In one preferred embodiment, the coated meat product is selectively heated and dehydrated using a circulating air oven. In another preferred embodiment, the coated meat product is selectively heated and dehydrated using an impinging air oven. Impinging air ovens cause hot air to be impinged on the top and bottom of the meat product, thereby breaking the boundary layer surrounding the product's surface. Suitable circulating air and impinging air ovens are available from Stein, Inc., Sandusky, Ohio, Convenience Food Systems, Avon, Mass., Heat and Control, Inc., 20 Hayward, Calif., and Procter and Schwartz, Co., Horshau, Pa. Other energy sources for selectively heating and dehydrating the surface of the meat product provide energy in the form of laser light, medium wavelength infra red radiation or microwave radiation.

It has been discovered that the surface of the meat product can be selectively heated and dehydrated by exposing the surface to the energy source for a relatively short length of time. In accordance with the inventive method, a crisp surface having a golden-brown color will develop, without 30 substantial moisture loss of the browned, precooked, whole muscle meat product. In accordance with the inventive process, the moisture loss of the meat product will be less than about 4% and in some embodiments less than about 3% or even less than about 1%, based on the initial weight of the meat product. Consequently, precooked, whole muscle meat products are produced which not only have highly desirable golden-brown color, but have the crisp surface and moist interior associated with naturally smoked or home-cooked products. Furthermore the golden-brown color is uniform and stable and retained throughout the life of the product without imparting an objectionable smoky flavor, without forming an oily surface, without substantially shrinking the meat product, and without adversely affecting the shelf-life of the meat product but instead, increasing the shelf-life and sensory quality of the product.

The following examples are included to further illustrate the invention. They are not limitations thereon.

EXAMPLE 1

A turkey breast was precooked in the following manner. An uncooked turkey breast was injected with a solution containing 82.8 wt. % water, 4.7 wt. % salt, 1.6 wt. % sodium tri-poly phosphate, 7.3 wt. % starch, 2.7 wt. % 55 dextrose, and 0.9 wt. % flavorings. The resulting 36 wt. % injected turkey breast was tumbled and vacuumed packaged in a poly bag, then cooked in a steam box. After chilling to 39.7° F., the bag was removed from the turkey breast; gelatin purge was removed from its surface using a hot water spray; 60 and the turkey was quickly predried using hot air. The precooked, cleaned, and dried turkey breast weighed 6.86 pounds.

A solution containing 300 ml of ST-300 (Red Arrow Co. in Manitowoc, Wis.), 200 ml of Select 24P (Red Arrow Co., 65 Manitowoc, Wis.), and 3600 ml of water was mixed slowly to avoid excess foaming. The resulting browning liquid was

6

applied to the surface of the turkey breast to form a coating weighing 0.03 pounds (0.4 wt. % based on the weight of the uncoated turkey breast).

The coated turkey breast was then placed in a circulating air oven. The turkey breast was browned with for eight minutes with by circulating air heated to 570° F. past both the top and the bottom of the product. The following temperature measurements were recorded:

Temperature before browning 40° F.

Temperature ¼" below surface during browning 104° F.

Temperature 1" below the surface during browning 85° F.

Core Temperature after Browning 43° F.

The following color measurements were also recorded for the browned turkey breast using a Hunter Lab Color-Meter:

	L•	Α•	В•	
20	· 52.2	9.6	30	

The weight of the browned turkey breast was 6.6 pounds, so that the weight loss was about 3.8%.

EXAMPLE 2

A preceoked turkey breast was prepared using the procedure of Example 1. The precooked, cleaned, and dried turkey breast weighed pounds.

A browning liquid was then made of 50% (W/W) Maillose (Red Arrow Co., Manitowoc, Wis.) and water. The precooked turkey breast was dipped in the browning liquid for thirty seconds. The surface of the turkey breast picked up 0.02 pounds of this mixture to form a coating (0.3 wt. % based on the weight of the uncoated turkey breast).

The coated turkey breast was then placed in a circulating air oven. The initial temperature of the turkey breast was 40° F. The turkey breast was then browned with air heated to 535° F. circulated past the top, bottom, and sides of the product. A golden brown color was developed within a period of 5–6 minutes. Immediately after browning the core temperature was still 40° F.

The following color measurements were recorded for the browned turkey breast using a Hunter Lab Color-Meter:

L*	Α*	В•	
 50	9.8	30.5	

The weight of the browned turkey breast was 6.99 pounds, so that the weight loss during browning was 2.1%.

EXAMPLE 3

A turkey breast was precooked in the following manner. An uncooked turkey breast was injected with a solution containing 82.8 wt. % water, 4.7 wt. % salt, 1.6 wt. % sodium tri-poly phosphate, 7.3 wt. % starch, 2.7 wt. % dextrose, and 0.9 wt. % flavorings. The resulting 45 wt. % injected turkey breast was then tumbled and vacuumed packaged in a poly bag, then cooked in a steam box. After chilling to 39.7° F., the bag was removed from the turkey breast; gelatin purge was removed from its surface using a hot water spray; and the turkey was quickly predried using hot air. The weight of the precooked, cleaned, and dried turkey breast was 9.5 pounds.

The thus prepared turkey breast was submerged for thirty seconds in an undiluted solution of Maillose (Red Arrow Co., Manitowoc, Wis.). The coated turkey breast was then placed in a circulating air oven. The air in the oven was maintained at a temperature of 410° F. The velocity of the air 5 across the coated turkey breast, as measured at the entry zone of the oven, was 3100 feet per minute. The turkey breast was heated for six minutes until a golden-brown color developed. The weight loss after browning was 3%.

The browned product was then chilled in a blast chiller to 10 40° F. and packaged. The following color measurements were recorded for the browned turkey breast using a Hunter Lab Color-Meter:

L.	Α*	В*	_
53.2	14.3	39.9	<u>-</u>

EXAMPLE 4

A turkey breast was precooked using the procedure of Example 1. It weighed 7.56 pounds and had a protein content of 18.7 wt. %, a fat content of 18.9 wt. %, a moisture content of 74.3 wt. %, and a salt content of 1.9 wt. %. Color 25 measurements for the precooked turkey breast were recorded and are reported below.

The precooked turkey breast was submerged for one minute in a browning liquid made of 50% (W/W) Maillose (Red Arrow Co., Manitowoc, Wis.) and water. The coated turkey breast was then exposed to a laser marking system manufactured by Synrad Laser Company, Mukiliteo, Wash. The system had a 130 watt power source, a wave length of 10.6 microns, and a 370 MM. laser lens. The cycle time for the browning was two minutes.

Color measurements for the browned turkey breast were recorded. Following are the Hunter Lab Color-Meter measurements for both the untreated and the browned turkey breast:

	L•	A*	B•
Untreated	82.1	1.5	14.6
Treated	48.9	11.5	29.8

The weight of the browned turkey breast was 7.50 pounds, so that the weight loss during browning was 0.8%

EXAMPLE 5

A turkey breast was precooked using the procedure of Example 1. A browning liquid was prepared by mixing a 50% (W/W) solution of Maillose (Red Arrow Co. in Manitowoc, Wis.) and water with a turkey broth solution, in 55 from about 100° C. to about 290° C. a volume ratio of 90:10/Maillose solution:turkey broth solution. The mixture was then applied on the surface of the product. A 0.25% pick up was targeted.

This coated turkey breast was then exposed to medium range infra-red radiation energy. The Hunter Lab Color- 60 Meter measurement for the browned turkey breast were L*=57.1; A*=8.8; B*=30.7. The product loss was less than 2%.

While the invention has been described in connection with its preferred embodiments, it will be understood that it 65 is not intended to limit this invention thereto, but it is intended to cover all modifications and alternative embodi-

ments falling within the spirit and scope of the invention as expressed in the appended claims.

I claim:

1. A process for browning precooked, whole muscle meat products comprising:

coating a browning liquid pyrolysis product onto at least a portion of the surface of a precooked whole muscle meat product; and then

exposing the coated surface to an energy source and selectively heating the coated surface of the whole muscle meat product at a temperature and for a time sufficient to develop a golden-brown color on the exposed surface, without substantial shrinking the precooked, whole muscle meat product.

2. The process in accordance with claim 1 wherein the precooked, whole muscle meat product is selected from the group consisting of poultry, meat, and fish products.

3. The process in accordance with claim 2 wherein the precooked, whole muscle meat product is a precooked turkey breast or a precooked chicken breast.

4. The process in accordance with claim 2 wherein the browning liquid pyrolysis product is obtained from the pyrolysis of hardwoods or sugars.

5. The process in accordance with claim 4 wherein the browning liquid pyrolysis product is obtained from the pyrolysis of dextrose.

6. The process in accordance with claim 4 wherein the amount of browning liquid ranges from about 0.05 to about 1.0 wt. %, based on the weight of the precooked, whole muscle meat product.

7. The process in accordance with claim 6 wherein the amount of browning liquid ranges from about 0.1 to about 0.8 wt. %, based on the weight of the precooked, whole muscle meat product.

8. The process in accordance with claim 2 further com-35 prising the browning liquid pyrolysis product contains a masking agent or flavoring enhancing composition.

9. The process in accordance with claim 3 further comprising the browning liquid pyrolysis product contains from about 0.5 to about 15 wt. % turkey flavor or turkey broth or a mixture of the two.

10. The process in accordance with claim 2 wherein the energy source is a circulating air oven, an impinging air oven, a laser light source, a medium wavelength energy infra red radiation source or a source of microwave radiation.

11. The process in accordance with claim 10 wherein the energy source is a circulating air oven or an impinging air

12. The process in accordance with claim 11 wherein the energy source selectively heats the surface of the meat product by creating an environment having a temperature greater than about 60° C.

13. The process in accordance with claim 12 wherein the energy source selectively heats the surface of the meat product by creating an environment having a temperature

14. The process in accordance with claim 13 wherein the energy source selectively heats the surface of the meat product by creating an environment having a temperature from about 150° C. to about 260° C.

15. The process in accordance with claim 2 further comprising prior to exposing the meat product to the energy source, the temperature at the core of the meat product is less than about 5° C. and immediately after browning the meat product, the temperature at the core of the meat product is less than about 13° C.

16. The process in accordance with claim 15 wherein prior to exposing the meat product to the energy source, the temperature at the core of the meat product is less than about 5° C. and immediately after browning the meat product, the temperature at the core of the meat product is less than about 5° C.

- 17. The process in accordance with claim 1 further 5 comprising predrying the precooked, whole muscle meat product to remove free-water from the product's surface prior to the coating.
- 18. The process in accordance with claim 2 further comprising predrying the precooked, whole muscle meat 10 product to remove free-water from the product's surface prior to the coating.
- 19. The process in accordance with claim 6 further comprising predrying the precooked, whole muscle meat product to remove free-water from the product's surface 15 prior to the coating.
- 20. A process for browning a precooked chicken breast or a turkey breast comprising:
 - coating at least a portion of the surface of a precooked chicken breast or a precooked turkey breast with from about 0.05 to about 1.0 wt. %, based on the weight of the breast, of a browning liquid pyrolysis product obtained from hardwoods or sugars; and then
 - selectively heating the coated surface of the breast in an environment having a temperature greater than about 60° C. with energy provided by a circulating air oven, an impinging air oven, a laser light source, a medium wavelength energy infra red radiation source or a source of microwave radiation for a time sufficient to develop a golden-brown color on the coated surface, where the shrinkage of the precooked, whole muscle meat product is less than 4 wt. % based on the initial weight of the meat product.
- 21. The process in accordance with claim 20 wherein the precooked breast is a precooked turkey breast.
- 22. The process in accordance with claim 21 wherein the browning liquid pyrolysis product is obtained from the pyrolysis of dextrose.
- 23. The process in accordance with claim 22 wherein the amount of browning liquid ranges from about 0.15 to about 0.3 wt. %, based on the weight of the breast.
- 24. The process in accordance with claim 20 further comprising the browning liquid pyrolysis product contains a masking agent or flavoring enhancing composition.
- 25. The process in accordance with claim 22 further comprising the browning liquid pyrolysis product contains from about 0.5 to about 15 wt. % turkey flavor or turkey broth or a mixture of the two.

- 26. The process in accordance with claim 23 wherein the energy source is a circulating air oven or an impinging air oven.
- 27. The process in accordance with claim 26 wherein the energy source selectively heats the surface of the breast by creating an environment having a temperature from about 100° C. to about 290° C.
- 28. The process in accordance with claim 26 wherein the energy source selectively heats the surface of the breast by creating an environment having a temperature from about 150° C. to about 260° C.
- 29. The process in accordance with claim 20 further comprising prior to exposing the meat product to the energy source, the temperature at the core of the meat product is less than about 5° C. and immediately after browning the meat product, the temperature at the core of the meat product is less than about 13° C.
- 30. The process in accordance with claim 28 wherein prior to exposing the meat product to the energy source, the temperature at the core of the meat product is less than about 5° C. and immediately after browning the meat product, the temperature at the core of the meat product is less than about 5° C.
- 31. The process in accordance with claim 1 wherein the shrinkage of the precooked, whole muscle meat product is less than 4 wt. % based on the initial weight of the meat product.
- 32. The process in accordance with claim 2 wherein the shrinkage of the precooked, whole muscle meat product is less than 1 wt. % based on the initial weight of the meat product.
- 33. The process in accordance with claim 21 wherein the shrinkage of the precooked, whole muscle meat product is less than 1 wt. % based on the initial weight of the meat product.
- 34. The process in accordance with claim 20 further comprising predrying the precooked, whole muscle meat product to remove free-water from the product's surface prior to the coating.
- 35. The process in accordance with claim 21 further comprising predrying the precooked, whole muscle meat product to remove free-water from the product's surface prior to the coating.
- 36. The process in accordance with claim 22 further comprising predrying the precooked, whole muscle meat product to remove free-water from the product's surface prior to the coating.

Inter-Offic Mem randum

Armour Swift-Eckrich

Date April 11, 1995

From J. Gutierrez

Copies M. Chaney

R. Cantu

Subject

Unitherm Stainless Steel, Inc.

A. Mikelberg invited Ted and I to meet David Howard, owner and President of this company today. Arnie has known David for some time and has awarded over \$4 million of business to him while at Thorn Apple Valley.

Unitherm has 120 employees in three plants. Two plants are located in the U.K. and a new 50,000 sq. ft. plant is being prepared in Oklahoma. The company has two business divisions. One division specializes in fabricated stainless steel products such as vats, trolleys, racks, molds, etc. The other division concentrates on mechanical systems to move product and continuous cooking/chilling systems for a broad range of products.

This company specializes in custom applications.

After a brief meeting with Arnie, we reconvened with S. Plichta, Prem Singh and P.E. Wong in Ted's office. After a short review of some of David's equipment, Ted asked us to get David involved in the following projects:

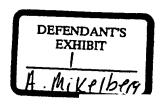
- 1. Exact weight Smoked Sausage/Cutting, collating and loading. This is the top priority, P.E. and David are to travel to Kalamazoo in the next few weeks so David can study the process. There will be a follow-up meeting after this visit.
- 2. Cold smoking of Turkey Breasts.
- 3. Automated handling of pre-cooked bacon into the packaging machine.
- 4. Smoked Ham production, Honey Creek.

David will have a demo cooking unit at IFFA which he will ship to PDL after the show so we can do product testing.

Attached is literature on the range of equipment offered.

In addition to the above activities, let's have David quote on our fabrication needs as they arise. We should also have him give us a test quote for vats for the new plant.

JFG/lg







DAVID HOWARD

DAVID HOWARD MANAGING DIRECTOR

1680-82 CARMEN DRIVE, ELK GROVE VILLAGE, ILLINOIS 60007 U.S.A. TELEPHONE, (708) 806 0454 FAX: (708) 806 1321 BAILEY ROAD,
OFF ASHBURTON ROAD WEST,
TRAFFORD PARK, MANCHESTER
M17 1SA
TELEPHONE: 061 816 8951.
FACSIMILE, 061 816 8955

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF OKLAHOMA

§ §

UNITHERM FOOD SYSTEMS, INC., an Illinois corporation; and JENNIE-O FOODS, INC., a Minnesota corporation,

Plaintiff,

V.

SWIFT-ECKRICH, INC., d/b/a CONAGRA REFRIGERATED FOODS, a Delaware corporation,

Defendant

CASE NO. CIV-01-347-C

NOTICE OF WILLOW BROOK FOODS' OBJECTIONS TO NOTICES TO TAKE DEPOSITION

Pursuant to FED.R.CIV.P. 45(c)(2)(B), Willow Brook Foods, Inc. ("Willow Brook Foods") files its objections to the Notice to Take Deposition served on Willow Brook Foods on October 4, 2001 by Plaintiffs Unitherm Food Systems, Inc. and Jennie-O Foods, Inc. (attached hereto as Exhibit A) and the Cross-Notice served on Willow Brook Foods on October 8, 2001 by Defendant Swift-Eckrich, Inc. (d/b/a Conagra Refrigerated Foods), and would respectfully show the Court as follows:

GENERAL OBJECTIONS

All general objections are hereby incorporated into each specific response. Any objection or lack of objection to any portion of the request is not to be deemed an admission that Willow Brook Foods has documents sought in a particular request.

- 1. Willow Brook Foods objects insofar as the subpoenas require the production or disclosure of any privileged communication or of an attorney's work-product on the ground that such discovery is impermissible under Rule 26(b) of the Federal Rules of Civil Procedure.
- 2. Willow Brook Foods objects insofar as the subpoenas require disclosure f materials that would be cumulative of other discovery produced.
- 3. Willow Brook Foods objects insofar as the subpoenas require disclosure of materials that would be duplicative of other discovery produced.
- 4. Willow Brook Foods objects on the grounds that the subpoenas would impose an undue burden because they require disclosure of materials irrelevant to the issues underlying the request.
- 5. Willow Brook Foods objects insofar as the subpoenas require disclosure of trade secrets or other confidential, proprietary business materials protected by FED.R.CIV.P. 45(c)(3)(B).
- 6. Willow Brook Foods objects to the production of "all documents" on the grounds that such a requirement is overly broad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Willow Brook Foods also objects insofar as the subpoenas require the production of documents outside the possession, custody or control of Willow Brook Foods and to the extent that the subpoenas also require Willow Brook Foods to account for documents that are no longer in its possession, custody or control or in existence.

Without waiving the general objections and the objections set forth in response to the specific requests for documents to be produced, Willow Brook Foods responds, within the limits of these objections, as set forth below.

RESPONSES AND OBJECTIONS TO DOCUMENTS REQUESTED BY PLAINTIFFS' NOTICE TO TAKE DEPOSITION (EXHIBIT A)

REQUEST NO. 1.

Any and all documents and information regarding reduction to practice of the process which Unitherm sold to Hudson Foods now knows as Willow Brook Food, Inc.

RESPONSE TO REQUEST NO. 1.

Willow Brook Foods objects to this request on the grounds that it is overly broad and unduly burdensome, and is not reasonably limited in time or scope. Willow Brook Foods further objects that the request fails to define with reasonable particularity the phrase "regarding reduction to practice" or the information Plaintiffs seek.

REQUESTNO. 2.

Any and all documents relating to an offer for sale of product produced by the process and equipment sold to you by Unitherm Food Systems, Inc.

RESPONSE TO REQUEST NO. 2.

Willow Brook Foods objects to this request on the grounds that it is overly broad and unduly burdensome (i.e., it presumably seeks all invoices, shipping records, accounting records, receipts, etc.), and is not reasonably limited in time or scope.

REQUESTNO. 3.

Any and all documents relating to the purchase of the process and equipment from Unitherm Food Systems, Inc.

RESPONSE TO REQUEST NO. 3.

Willow Brook Foods objects to this request on the grounds that it is overly broad and unduly burdensome, and is not reasonably limited in time or scope. Willow Brook Foods further objects that the request fails to define with reasonable particularity the information Plaintiffs seek.

REQUEST NO. 4.

Any and all documents relating to the purchase and installation of the process and equipment sold to you by Unitherm Food Systems, Inc.

RESPONSE TO REQUEST NO. 4.

Willow Brook Foods objects to this request on the grounds that it is overly broad and unduly burdensome, and is not reasonably limited in time or scope. Willow Brook Foods further objects

that the request fails to define with reasonable particularity the phrase "installation of the process" or the information Plaintiffs seek.

REQUEST NO. 5.

Any and all accounting information and the like relating to the product produced by the process and oven which has been sold to third parties including all inventory control information, applicable dates and invoices.

RESPONSE TO REQUEST NO. 5.

Willow Brook Foods objects to this request on the grounds that it is overly broad and unduly burdensome, and is not reasonably limited in time or scope. Willow Brook Foods further objects that the request fails to define with reasonable particularity the phrase "accounting information and the like" or the information Plaintiffs seek.

RESPONSES AND OBJECTIONS TO DOCUMENTS REQUESTED BY PLAINTIFFS' NOTICE TO TAKE DEPOSITION (EXHIBIT A)

REQUESTNO. 1.

All documents that mention, evidence, or reflect any of the subjects of testimony described in Exhibit A.

RESPONSE TO REQUEST NO. 1.

Willow Brook Foods objects to this request on the grounds that it is overly broad and unduly burdensome, and is not reasonably limited in time or scope (i.e., the request potentially seeks all contracts, invoices, receipts, correspondence, phone records, shipping and distribution records, accounting records, etc.). Willow Brook Foods further objects to this request to the extent it seeks privileged materials or proprietary business information, including documents protected by the attorney-client privilege, the work product privilege.

REOUEST NO. 2.

All documents that mention, evidence, reflect negotiation of, or constitute any confidentiality agreement between Willow Brook Foods, Inc. and/or Hudson Foods, Inc., on the one hand, and Unitherm Food Systems, Inc., on the other hand.

RESPONSE TO REQUEST NO. 2.

Willow Brook Foods objects to this request on the grounds that it is overly broad and unduly burdensome, and is not reasonably limited in time or scope. Willow Brook Foods further objects to this request to the extent it seeks privileged materials or proprietary business

information, including documents protected by the attorney-client privilege, the work product privilege.

REQUESTNO. 3.

All documents that mention, evidence, or reflect Willow Brook Foods, Inc.'s and/or Hudson Foods, Inc.'s satisfaction or dissatisfaction with any process, equipment, and/or oven purchased from Unitherm Food Systems, Inc.

RESPONSE TO REQUEST NO. 3.

Willow Brook Foods objects to this request on the grounds that it is overly broad and unduly burdensome, and is not reasonably limited in time or scope.

REQUESTNO. 4.

All documents that mention, evidence, or reflect customer complaints regarding any product made with any process, equipment, and/or oven purchased from Unitherm Food Systems, Inc.

RESPONSE TO REQUEST NO. 4.

Willow Brook Foods objects to this request on the grounds that it is overly broad and unduly burdensome, and is not reasonably limited in time or scope. Willow Brook Foods accepts returned items that may reflect a number of customer complaints, including complaints unrelated to the subject matter of this lawsuit.

REQUESTNO. 5.

All documents that mention, evidence, or reflect the return to Willow Brook Foods, Inc. and/or Hudson Foods, Inc. of any product made with any process, equipment, and/or oven purchased from Unitherm Food Systems, Inc.

RESPONSE TO REQUEST NO. 5.

See response to Request No. 4 above.

Respectfully submitted,

AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P. 300 Convent Street, Suite 1500 San Antonio, Texas 78205 (210) 281-7011 (210) 224-2035 (FAX)

CHARLES W. HANOR

State Bar No. 08928800

ATTORNEY FOR WILLOW BROOK FOODS, INC.

4,000 0 0

CERTIFICATE OF SERVICE

I certify that on the 12th day of October 2001, a true and correct copy of the foregoing was served by first-class mail on the foll wing:

Burck Bailey Greg A. Castro Fellers, Snider, Blankenship, Bailey & Tippens 100 N. Broadway, Ste. 1700 Oklahoma City, OK 73102-8820

Dennis D. Brown Fellers, Snider, Blankenship, Bailey & Tippens 321 South Boston, Stc. 800 Tulsa, OK 74103-3318

Robert D. Tomlinson Keith D. Tracy McKinney & Stringer Corporate Tower 101 North Robinson Ave., Ste. 1300 Oklahoma City, OK 73102-5504

Robert A. Schroeder Howard A. Kroll Christie, Parker & Hale 350 W. Colorado Blvd. Pasadena, CA 91105

John P. Passarelli
David H. Roe
McGrath, North, Mullin & Kratz
222 South Fifteenth Street, Ste. 1400
Omaha, NE 68102

Charles W. Hanes

065396.0047 San Antonio #232582 v1

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF OKLAHOMA

a Illinois corporation; AND JENNIE-O FOODS, INC., a Minnesota corporation,)))
Plaintiffs,)
v.) Case No. CIV-01-347-C
SWIFT-ECKRICH, INC. d/b/a CONAGRA REFRIGERATED FOODS, a Delaware corporation,)))
Defendant.)

NOTICE TO TAKE DEPOSITION

TO: All Parties of Record

PLEASE TAKE NOTICE that Plaintiff, Unitherm Food Systems, Inc. and Jennie-O Foods, Inc., will take the deposition upon oral examination of Hudson Foods, Inc. now known as Willow Brook Food, Inc. ("Willow Brook") through such officers, directors, managing agents or other persons as may be designated by the deponent pursuant to Rule 30(b)(6) of the Federal Rules of Civil Procedure. The deposition will take place at the offices of Willow Brook, 405 N. Jefferson, Springfield, Missouri 65851, beginning at 1:30 p.m. on October 17, 2001, and will continue from day to day until completed. The deposition will be taken before a notary public or other officer authorized by law to administer oaths. The deposition may be videotaped.

Ex. A

Please take further notice that pursuant to Fed. R. Civ. P. 30(b)(6) Willow Brook is required to designate one or more officers, directors, managing agents or other persons who consent to testify on its behalf. The matters upon which examination is requested and as to which the deponent(s) will be examined are those items listed below:

- 1. Any and all documents and information regarding reduction to practice of the process which is the subject of the patent.
- 2. Any and all documents relating to offer for sale of product produced by the process and oven sold to you by Unitherm Food Systems, Inc.
- 3. Any and all documents relating to the purchase of the process and equipment from Unitherm Food Systems, Inc.
- 4. Any and all documents relating to the installation of the process and equipment produced by or sold to you by Unitherm Food Systems, Inc.
- 5. Any and all accounting information and the like relating to product produced by the process and oven which have been sold to third parties including all Pack Code dates and purchase orders and bills of lading.

YOU ARE INVITED TO ATTEND AND CROSS-EXAMINE.

DATED this ____ day of October, 2001.

Burck Bailey (Of A No. 415)

Greg A. Castro (OBA No.11787)

Fellers, Snider, Blankenship, Bailey & Tippens

100 North Broadway, Suite 1700

Oklahoma City, Oklahoma 73102-8820

Telephone:

(405) 232-0621

Facsimile:

(405) 232-9659

-and-

Dennis D. Brown (OBA No. 13662) Fellers, Snider, Blankenship, Bailey & Tippens 321 South Boston, Suite 800

Tulsa, OK 74103-3318

Telephone:

(405) 599-0621

Facsimile:

(405) 583-9659

Attorneys for Plaintiffs, Unitherm Food Systems, Inc. and Jennie-O Foods, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on the 4th day of October, 2001, a true and correct copy of the foregoing was served via Facsimile and U.S. Mail, postage prepaid thereon, to the following:

Robert D. Tomlinson Keith D. Tracy McKinney & Stringer Corporate Tower 101 North Robinson Ave., Suite 1300

Oklahoma City, OK 73102-5504 Telephone: (405) 239-6444

Facsimile:

(405) 239-6444 (405) 239-7902 Robert A. Schroeder Howard A. Kroll, Esq. Christie, Parker & Hale 350 W. Colorado Boulevard

Pasadena, CA 91105

Telephone: Facsimile: 626-795-9900

626-577-8800

John P. Passarelli
David H. Roe
McGrath, North, Mullin & Kratz
222 South Fifteenth Street, Suite 1400
Omaha, NE 68102

Telephone: 402-341-3070 Facsimile: 402-341-0216

Attorneys for Defendant

Greg A. Ca

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FOR THE WESTERN DISTRICT OF OKLAHOMA

UNITHERM FOOD SYSTEMS, INC., an Illinois corporation; and JENNIE-O FOODS, INC., a Minnesota corporation,	· }
Plaintiffs,)
v.) Case No. CIV-01-347-C
SWIFT-ECKRICH, INC. d/b/a CONAGRA REFRIGERATED FOODS, a Delaware corporation,	
Defendant.	}
AMENDED SUBP	OENA DUCES TECUM
TO: Willow Brook Food, Inc. c/o Charles Hanor, Esq. 300 Convent, Suite 1500 San Antonio, TX 78205	
YOU ARE COMMANDED to appear in the United State the above case.	es District Court at the place, date, and time specified below to testify i
PLACE OF TESTIMONY	COURTROOM
•	DATE AND TIME
YOU ARE COMMANDED to appear at the place, date, as case.	nd time specified below to testify at the taking of a deposition in the abov
PLACE OF DEPOSITION	DATE AND TIME
YOU ARE COMMANDED to produce and permit inspect and time specified below (list of documents or objects): See Exhi	tion and copying of the following documents or objects at the place, data ibit "A" attached hereto
PLACE	DATE AND TIME
Willow Brook Foods, Inc. 405 N. Jefferson, Springfield, Missouri 65851	October 17, 2001, 1:30 p.m.
YOU ARE COMMANDED to permit inspection of the for PREMISES	ollowing premises at the date and time specified below. DATE AND TIME
	used for the taking of a deposition shall designate one or more fficer fy on its behalf, and may set forth, for each person designated, the matter e, 30(b)(6).
ESUING OFFICER SCANTURE AND THILE (INDICATE IF ATTORNEY FOR PLAINT	· · · · · · · · · · · · · · · · · · ·
ISSUNG OFFICES AME, ADDRESS AND PHONE NUMBER Greg A. Castro, Fellers, Snider, Blankenship, Bailey & Tippens, 10 (405) 232-0621	0 N. Broadway, Suite 1700, Oklahoma City, OK 73102-8820; Telephon

EXHIBIT "A"

Please produce the following documents to the place stated above and provide them to Unitherm Food Systems, Inc. and Jennie-O Foods, Inc. for inspection and copying.

- 1. Any and all documents and information regarding reduction to practice of the process which Unitherm sold to Hudson Foods now known as Willow Brook Food, Inc.
- 2. Any and all documents relating to an offer for sale of product produced by the process and equipment sold to you by Unitherm Food Systems, Inc.
- 3. Any and all documents relating to the purchase of the process and equipment from Unitherm Food Systems, Inc.
- 4. Any and all documents relating to the purchase and installation of the process and equipment sold to you by Unitherm Food Systems, Inc.
- 5. Any and all accounting information and the like relating to product produced by the process and oven which has been sold to third parties including all inventory control information, applicable dates and invoices.

122379.1

AO \$8 (Rav. 1/94) Subposts in a Civil Cass

Issued by th UNITED STATES DISTRICT COURT

W stern DISTRICT OF Oklahoma

Unitherm Food Systems, Inc. and Jennie-O Foods, Inc.

SUBPOENA IN A CIVIL CASE

V.
Swift-Eckrich, Inc. dba Comagra
Refrigerated Foods

CASENIMBER: CIV-01-347-C

TO: Willow Brook Foods, Inc. c/o Charles Hanor, Esq., Akin, Gump, Strauss,	Hauer & Feld, LLP
300 Convent Street, Suite 1500, San Antonio, YOU ARE COMMANDED to appear in the United States District court	or the place, date, and time specified below to
	at the place, dried the fills specified offer -
testify in the above case.	COURTROOM
PLACE OF TRETUNONY	
	DATE AND TIME
YOU ARE COMMANDED to appour at the place, date, and time specifies the above case. regarding the subjects of testimony des	
PLACE OF DEPOSITION	DAYE AND TIME
Willow Brook Foods, Inc.	October 17, 2001
405 N. Jefferson, Springfield, MO 65851	2:30 p.m.
FLACE	DATE AND TIME
YOU ARE COMMANDED to permit inspection of the following premis	res at the date and time specified below.
PREMISES	DATE AND TIME
,	
Any organization not a party to this suit that is subposued for the take officers, directors, or managing agents, or other persons who consent to ten person designated, the matters on which the person will testify. Federal Rules or	f Civil Procedure, 30(b)(6).
ISSUING OFFICE AS BOUNTUINE AND TITLE MINICAPE IF ALL OSMEY FOR FLAINTIFF OF DEPEND	
MUIXU	October B, 2001
Howard A. Kroll, Christie, Parker & Hale LLP, Co 350 W. Colorado Blvd., 5th Floor, Pasadena, CA 9	unsel for Defendant 1109 (626)683-4521
(See Rule 45, Pederal States of Civil Presedent, Parts C &	D on well page)
1 'If action is pending in district other than district of insusace, state district under case number.	EV K NO#
KACCANOMONICS ANORMS CV SURP. WPD James 24, 2000 (2:32pm)	<u> </u>

Exhibit "A" to Subpoens

- a. Negotiation and/or execution of any confidentiality agreement between Willow Brook Foods, Inc. and/or Hudson Foods, Inc., on the one hand, and Unitherm Food Systems, Inc., on the other hand.
- b. Willow Brook Foods, Inc.'s and/or Hudson Foods, Inc.'s satisfaction or dissatisfaction with any process, equipment, and/or oven purchased from Unitherm Food Systems, Inc.
- c. Customer complaints regarding any product that was made using any process, equipment, and/or oven from Unithern Food Systems, Inc.
- d. Return to Willow Brook Foods, Inc. and/or Hudson Foods, Inc. of any product that was made with any process, equipment, and/or oven purchased from Unitherm Food Systems, Inc.

RAK PASS86174.1-4-10/8/01 6:19 PM

Exhibit "B" to Subpoens

1. All documents that mention, evidence, or reflect any of the subjects of testimony described in Exhibit A.

As used in herein, the term "document" is used in a comprchensive sense and refers to, without limitation, all correspondence, letters, e-mail, memoranda, handwritten notes, reports, proposals, Power Point slides or other presentation materials, disries, calendars, contracts, checks, invoices, accounts, accounting records, notes of meetings or telephone conversations, recordings, and all hand written, typed, printed, photocopied, photographed, faxed, telaxed or otherwise visually, mechanically or electronically reproduced materials, whether copies or originals, in whatever form.

- 2. All documents that mention, evidence, reflect negotiation of, or constitute any confidentiality agreement between Willow Brook Foods, Inc., and/or Hudson Foods, Inc., on the one hand, and Unitherm Food Systems, Inc., on the other hand.
- 3. All documents that mention, evidence, or reflect Willow Brook Foods, Inc.'s and/or Hudson Foods, Inc.'s satisfaction or dissatisfaction with any process, equipment, and/or oven purchased from Unitherm Food Systems, Inc.
- 4. All documents that mention, evidence, or reflect customer complaints regarding any product made with any process, equipment, and/or oven purchased from Unitherm Food Systems, Inc.
- 5. All documents that mention, evidence, or reflect the return to Willow Brook Foods, Inc. and/or Hudson Foods, Inc. of any product made with any process, equipment, and/or oven purchased from Unitherm Food Systems, Inc.